



IBM Power Systems™



Get to the Web Fast with System i Access for Web

<http://www.ibm.com/systems/i/software/access/web>

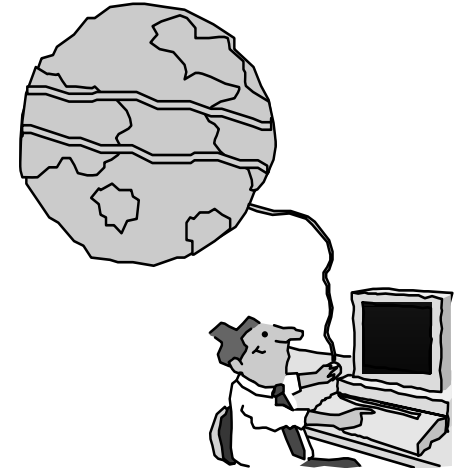
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System i Access for Web Development



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This publication may refer to products that are not currently available in your country. IBM makes no commitment to make available any products referred to herein.

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- **Getting started**
- **Ways to roll out to end users**
- **Control access to functions**



Note! A copy of this presentation can be found at:

ftp://ftp.software.ibm.com/as400/products/clientaccess/win32/presentations/2008_hasg

What is System i Access for Web?

End users can leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the client desktop through a web browser

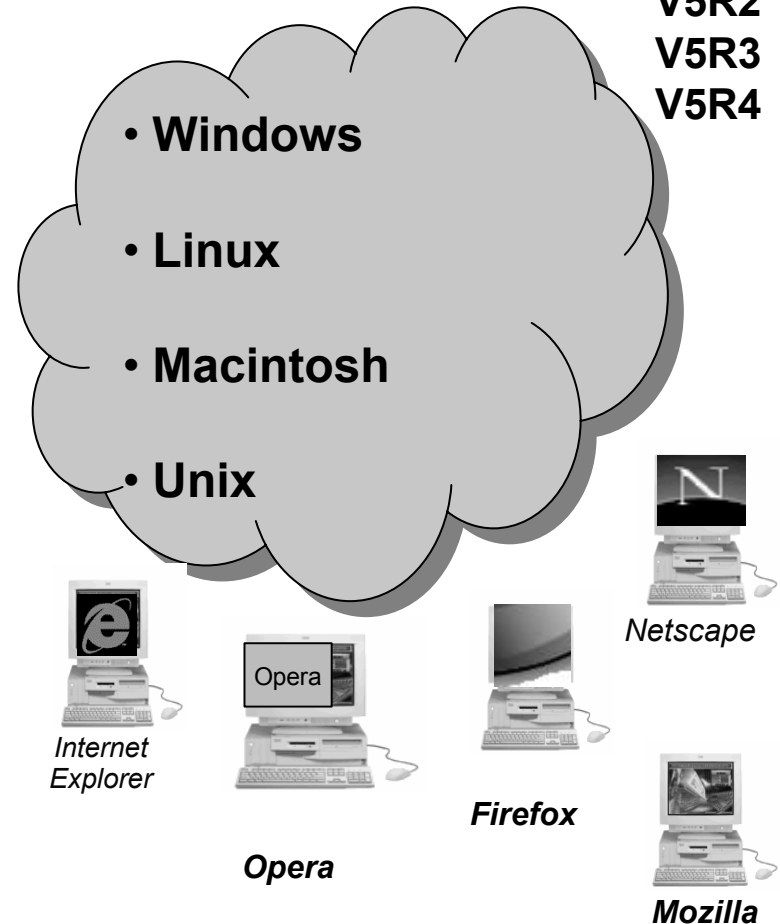
**OS/400
V5R2
V5R3
V5R4**

Provides access to iSeries through a browser

- **5250 access**
- **Access to database, integrated file system, printers, output queues, jobs**
- **Can run batch commands and send/receive messages**

It has the following advantages:

- **Is server based**
- **Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop**
- **Uses industry standard protocols - HTTP, HTTPS and HTML**



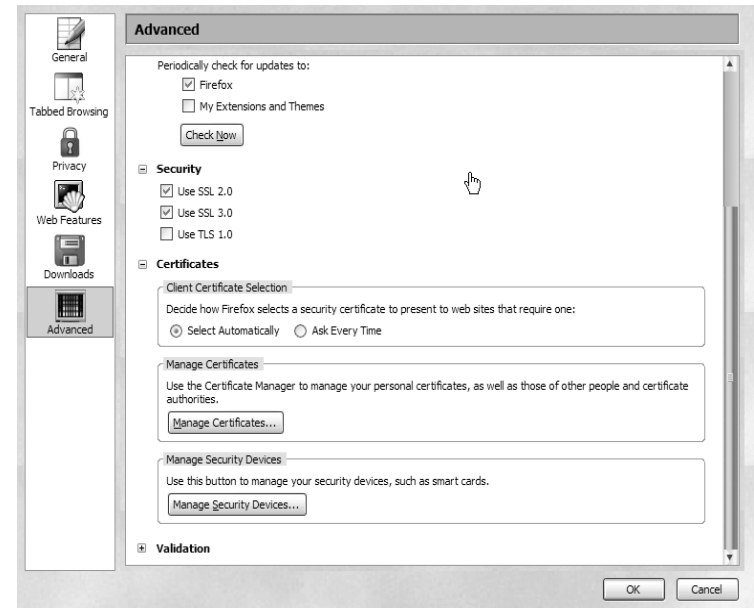
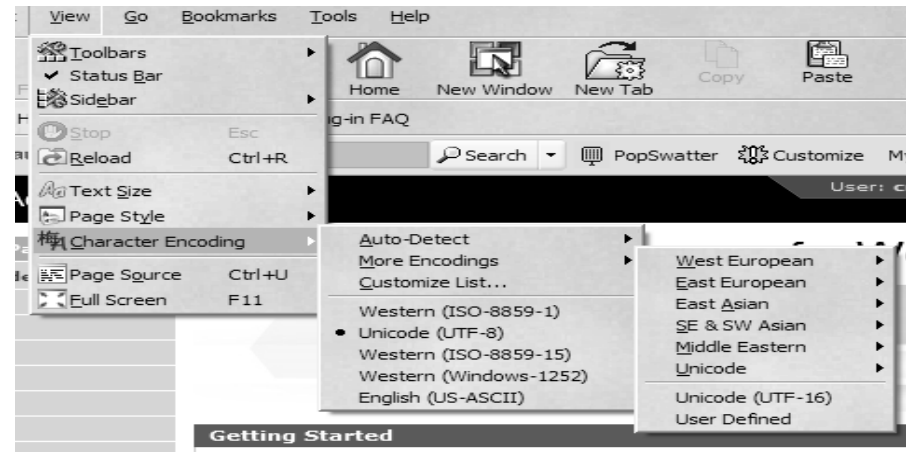
Fully Integrated with your Browser

- ❖ Use any code page available in your browser
 - System i Access for Web translated into 38 NLVs (including DBCS)
 - See screens in preferred language

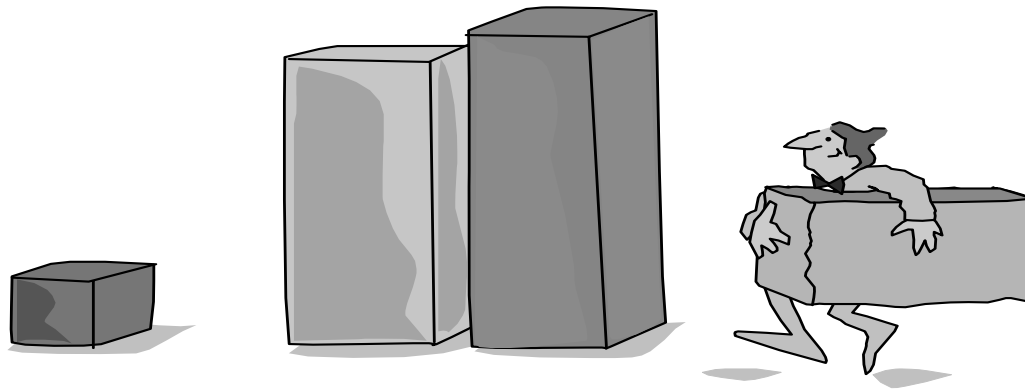
- ❖ Use any keyboard setting available in Windows

- ❖ Font Size

- ❖ Set up your SSL through your browser



Packaging and Ordering



System i Access Family - Packaging

V6R1 5761-XW1 System i Access Family	V5R4 5722-XW1 iSeries Access Family
System i Access for Windows, 5761-XE1, V6R1	iSeries Access for Windows, 5722-XE1, V5R4
System i Access for Web, 5761-XH2, V6R1	iSeries Access for Web, 5722-XH2, V5R4
System i Access for Linux, 5761-XL1, Vx.x (V6R1)	iSeries Access for Linux, 5722-XL1, V1.10 (V5R4)
System i Access for Wireless, 5722-XP1, V5R3	iSeries Access for Wireless, 5722-XP1, V5R3
V5R4 i5/OS customers not wanting to upgrade to V6R1 i5/OS but want the new V6R1 System i Access Family clients can order no-charge Feature No. 2649 of Product No. 5722-XW1	

- NOTE: iSeries Access for Web is available on V5R1 and later. This chart summarizes the releases that can currently be ordered.

Products - Focus

Description	Product	Product Number	Need 57xx-XW1* to use?
Family Name	➤ System i Access Family	57xx-XW1	
Windows client	➤ System i Access for Windows	57xx-XE1	Yes (for 5250 and Data Transfer)
Linux client	➤ System i Access for Linux	57xx-XL1	Yes (for 5250)
Browser Access	➤ System i Access for Web	57xx-XH2	Yes
Handheld / Wireless offering	➤ System i Access for Wireless ➤ iSeries Toolbox for Java ME	57xx-XP1	No
i5/OS systems management	➤ System i Navigator ➤ Operations Console	Packaged in 57xx-XE1	No

* 57xx = 5761 or 5722

Flexible Purchase Options:

- ☛ Processor-Based = purchase price based on software tier, connect unlimited numbers of users
- ☛ User-Based = purchase only number of users who will be concurrently connected

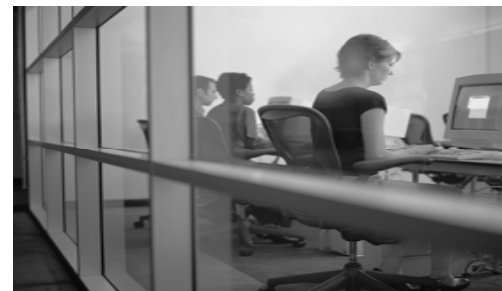
Notes:

- ☛ Can upgrade from User-Based to Processor-Based, but cannot go back to User-Based after purchasing Processor-Based
- ☛ Software maintenance included in base i5/OS software subscription

System i Access Family included with new hardware

- **System i Access Family (5722-XW1 or 5761-XW1) unlimited user feature included with the following System i hardware**
 - **System i Model 515 Express configurations**
 - See Announcement Letter 107-181 dated 4/1/07 for more details
 - **System i Model 525 Express and CBU configurations**
 - See Announcement Letter 107-182 dated 4/1/07 for more details
 - **System i Model 570 with POWER6 technology**
 - See Announcement Letter 107-448 dated 7/31/07 for more details
 - **The new Power Systems Models 570 and 595 - announced April 2008**
- **Any i5/OS user connecting to the above System i models is entitled to use any of the System i Access Family products at no additional charge. This includes:**

- **System i Access for Windows**
- **System i Access for Web**
- **System i Access for Linux**



Functions you can perform with System i Access for Web V6R1

Print

- Printer output
- PDF Printer output
- Printers
- PDF Printers
- Internet Printers
- Internet Printer Shares
- Printer shares
- Output Queues

5250

- Active Sessions
- Start 5250 Session
- Configured Sessions
- Bypass Sign-on

Files

- Browse Files
- File Shares
- Browse File Share

Messages

- Display Messages
- Send Messages
- Sametime
- Operator Messages
- Message Queue

Database

- Tables
- My Request
- Run SQL
 - Open Office Formats
 - ** Wizards supports joins across multiple tables
 - ** Chart SQL results
- Copy Data to Table
- Import Requests
 - System i Access for Windows
 - Query Manager
 - Query/400
- Extract Server Data

Commands

- Run commands
- My commands
- Search

My Personal Folder

Jobs

- User Jobs
- Server Jobs

Customize

- Preferences
- Policies
- Settings
- Transfer configuration data

Download

Other

- Bookmarks
- Change Password
- Connection Pool
- Status
- Trace

Single sign-on

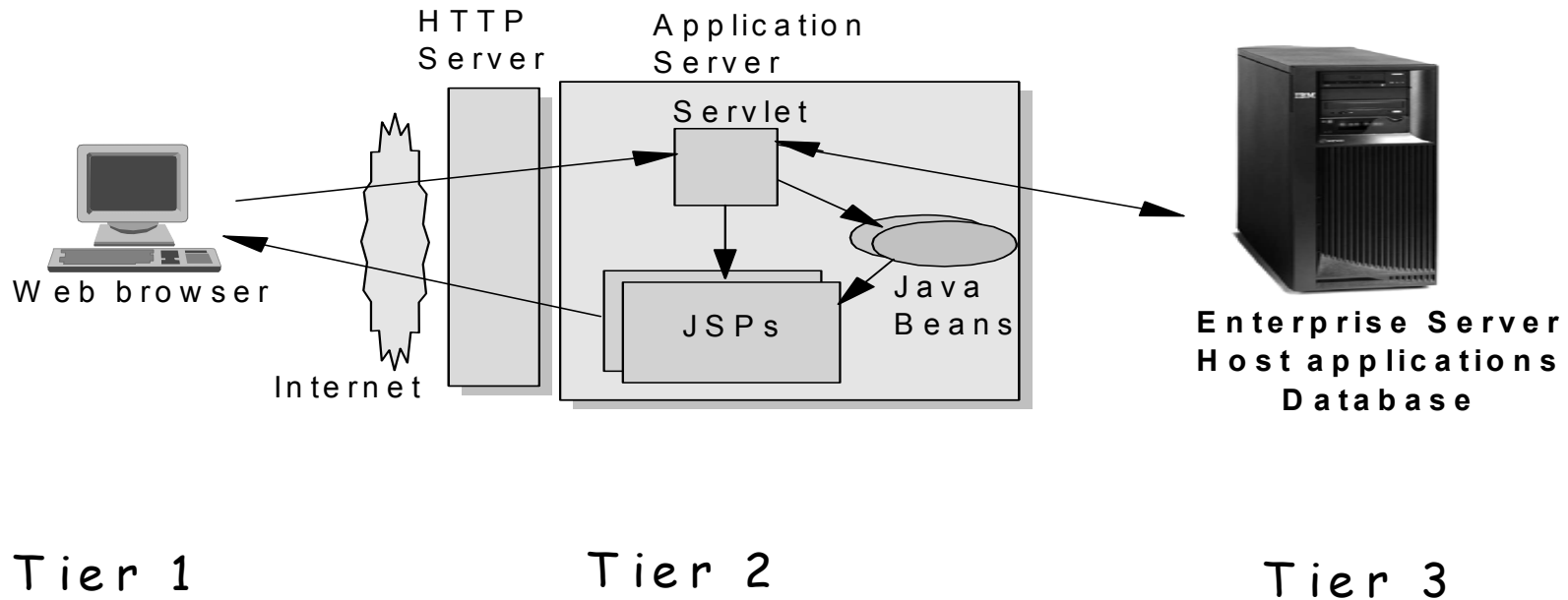
- EIM (WAS authentication)
- ** Windows domain login (WAS authentication)

** Scheduling of tasks

Items marked with “**” are new in the V6R1 version

Getting Started

Before you start with Access for Web you must get your web application server running



Supported Web Application Servers

• The System i Access for Web servlet code can be used with any of the following web application servers:

- Integrated web application server
- WebSphere® Application Server V6.1 and V6.0 – Express for i5/OS
- WebSphere Application Server V6.1 and 6.0 Base and Network Deployment
- WebSphere Application Server V5.1 - Express for iSeries
- WebSphere Application Server V5.0 - Express
- WebSphere Application Server V5.1 and 5.0 Base and Network Deployment Editions
- ASF Tomcat (**V5R4 and earlier releases**)

• The System i Access for Web portlet code can be used with any of the following portal servers.

- IBM Workplace Services Express V2.6
- WebSphere Portal for Multiplatforms V6.0
- WebSphere Portal for Multiplatforms V5.1.0.1
- WebSphere Portal Express for Multiplatforms V5.0.2
- WebSphere Portal Express Plus for Multiplatforms V5.0

PTFs required for latest web app server and portal support:

<http://www.ibm.com/systems/i/software/access/web/servicepacks.html>

Integrated Web application server

What is it? Does System i Access for Web support it?

- **What is the i5/OS integrated Web application server?**
 - A web application engine much like ASF Tomcat
 - Uses minimal system resources, similar to ASF Tomcat
 - Minimal effort by an Administrator to maintain
 - V5R4 is the last release i5/OS will contain ASF Tomcat

- **How is it packaged?**
 - 5761-DG1 and 5722-DG1 IBM HTTP Server for i5/OS
 - Integrated Web application server 7.1 is available in the DG1 group PTF
 - V5R4 SF99114 level 13 or later
 - V6R1 SF99115 level 1 or later

- **System i Access for Web support**
 - V5R4 and V6R1 System i Access for Web support the i5/OS integrated Web application server
 - V5R4 iSeries Access for Web can be installed and is supported on V5R4 and V5R3 i5/OS
 - V6R1 System i Access for Web can be installed and is supported on V6R1 and V5R4 i5/OS

Integrated Web application server – V6R1 or V5R4 i5/OS

Use V6R1 iSeries Access for Web within the V6R1 or V5R4 i5/OS integrated Web application server 7.1

1. Stop the Web Administration for i5/OS
 - ENDTCPSPVR SERVER(*HTTP) HTTPSPVR(ADMIN)
2. Load/apply latest 5722-DG1 group PTF (review cover letters for any additional information)
 - V5R4 SF99114 group 13 or later
 - V6R1 SF99115 group 1 or later
3. Load/apply latest V6R1 iSeries Access for Web PTF
 - SI29664 or later
4. Follow the instructions in the doc on this page:
<http://www.ibm.com/systems/i/software/access/web/servicepacks.html>

Link: “*Configuring an Integrated Web Application Server Instance*”

5. Open a browser to iSeries Access for Web using HTTP port
http://<your_system>:<your_port>/webaccess/iWAMain
6. Done!

Integrated Web application server – V5R3 i5/OS

To use the integrated web application server on V5R3 i5/OS using V5R4 iSeries Access for Web:

1. Stop the Web Administration for i5/OS
 - ENDCPSVR SERVER(*HTTP) HTTPSVR(ADMIN)
2. Load/apply latest V5R3 5722-DG1 group PTF (review cover letters for any additional information)
 - V5R3 SF99099 level 15 or later
3. Load/apply latest V5R4 iSeries Access for Web PTF
 - SI25551 or later
4. Configure iSeries Access for Web
 - QSH
 - cd /QIBM/ProdData/Access/Web2/install
 - cfgaccweb2 –appsvrtype *INTAPPSVR
5. Start the Web Administration for i5/OS
 - STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)
6. Start preconfigured HTTP web server
 - STRTCPSVR SERVER(*HTTP) HTTPSVR(IWADFT)
7. Open a browser to iSeries Access for Web using preconfigured HTTP:port
 - http://<system_name>:2020/webaccess/iWAMain
8. Done!

<http://www.ibm.com/systems/i/software/websphere/>

IBM Systems > System i >

WebSphere Application Server

for i5/OS

- [WebSphere Home](#)
- [What's New](#)
- [About WebSphere](#)
- [Ordering](#)
- [Documentation](#)
- [FAQs](#)
- [Business Solutions](#)
- [Samples](#)
- [PTFs](#)
- [Performance](#)
- [Coexistence](#)
- [Migration](#)
- [Forum](#)
- [Newsletter](#)
- [Related Resources](#)

Features

WebSphere Application Server Version 6.1 for i5/OS is announced. To find out more about the new version or any other of the supported versions — please click on the links below:

Version 6.1

- IBM WebSphere Application Server V6.1 for i5/OS
- IBM WebSphere Application Server for Developers V6.1 for i5/OS
- IBM WebSphere Application Server Network Deployment V6.1 for i5/OS
- IBM WebSphere Application Server – Express V6.1 for i5/OS

Version 6.0

- IBM WebSphere Application Server V6.0 for OS/400
- IBM WebSphere Application Server for Developers V6.0 for OS/400
- IBM WebSphere Application Server Network Deployment V6.0 for OS/400
- IBM WebSphere Application Server – Express V6.0 for OS/400

Version 5.1

- IBM WebSphere Application Server V5.1 for iSeries
- IBM WebSphere Application Server for Developers V5.1 for iSeries
- IBM WebSphere Application Server Network Deployment V5.1 for iSeries
- IBM WebSphere Application Server – Express for iSeries V5.1

Version 5.0

- IBM WebSphere Application Server V5.0 for iSeries
- IBM WebSphere Application Server Network Deployment V5.0 for iSeries
- IBM WebSphere Application Server – Express for iSeries V5.0

Need directions?



- [iSeries Developer roadmap](#)
- [An Independent Analysis of the iSeries Developer Roadmap - Updated for 2006 \(1.4MB\)](#)
- [The Business Benefits of iSeries Application Modernization \(183KB\)](#)
- [Get Adobe® Reader®](#)

Emerging Technology

- [Dynamic web site development for the non-technical business user.](#)

Pilot Pricing Program

- [IBM Software Pilot Pricing Program for IBM eServer i5 520 Systems](#)

Performance Considerations...

Use the IBM Systems Workload Estimator at
<http://www-912.ibm.com/wle/EstimatorServlet>

IBM eServer Workload Estimator
 Version: 2005.4.fbc.1
 14-Dec-05
 www-912

Workload Selection | **Workload Definition** | **Selected System** | **Help/Tutorials**

- Download PDF
- Printable Version
- Choose Base System
- Modify System
- External Storage
- Call Me Now
- Edit Estimation Info
- Options
- Change Growth Factors
- Save all Workloads

Selected System

■ Available
 ■ HATS #1

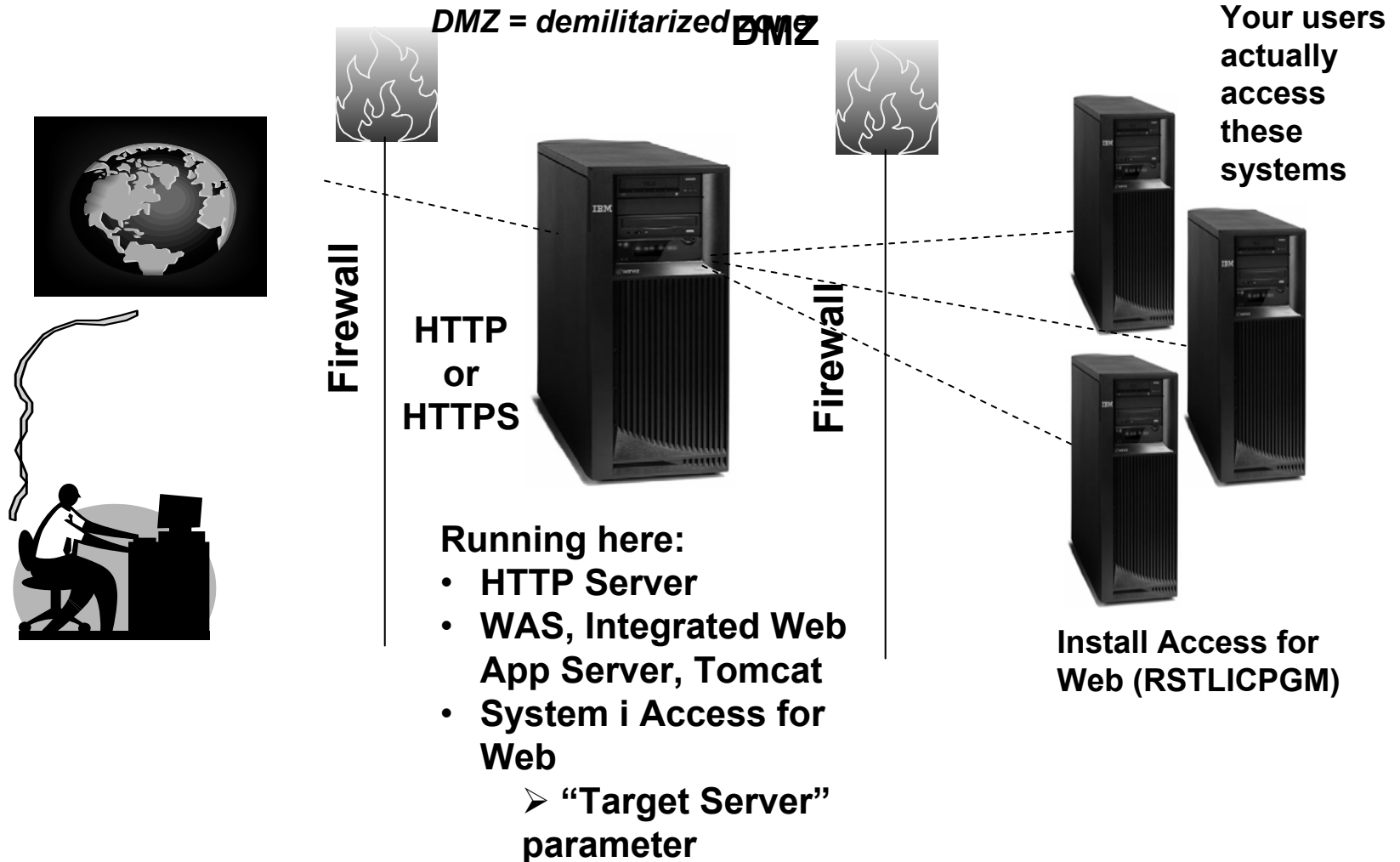
Solution	Available (%)	HATS #1 (%)
Immediate Solution	93.5%	6.5%
Growth Solution	90.2%	9.8%

The 520-8950/7450 can handle the defined workloads **NOW**.

It can also handle the specified growth.

Model/Feature:	520-8950/7450 500/30	520-8950/7450 500/30
Number of Systems:	1	1
Processor CPW:	500	500
5250 OLTP CPW:	30 (24% utilized)	30 (35% utilized)

Setting up your web application server



Only need to set up one web application server

Port Requirements Comparison

System i Access for Windows (5722-XE1)*

- Port 449 for Port Mapper
- Port 8476 (9476) for Sign-on
- Port 8470 (9470) for Central
- Port 8472 (9472) for Data Queues
- Port 8471 (9471) for Database
- Port 8475 (9475) for Remote Commands
- Port 8473 (9493) for Print
- Port 2001 (2010) for Web Admin
- Port 446 (448) for DDM
- Port 23 (992) for Telnet
- Port 137, 138 for NetServer
- Port 389 (636) for LDAP
- Port 5555 (5566) for Mgmt Central
- Port 53 if using DNS Server

System i Access for Web (5722-XH2)

- Port 80 (or any other port) for HTTP Server
- Port 443 (or any other port) for HTTPS Server

*See Information APAR
II12227 for detailed
information

Get System i Access for Web running

- **Get a copy of the System i Access for Web Install & Users Guide**
 - <http://www.ibm.com/systems/i/software/access/web/doc.html>
- **Install System i Access for Web from your i5/OS stacked media.**
 - **RSTLICPGM - Install Access for Web, 5722-XH2, into QIBM directory**
- **Configure and start System i Access for Web.**
 - **CFGACCWEB2 - Configure the System i Access for Web application server**
 - **STRACCWEB2 - Start the System i Access for Web application server.**
- **Set some policies to enable or limit access to various functions of Access for Web**

System i Access for Web Documentation on the Web...

V6R1

V6R1 System i Access for Web is supported on V6R1 and V5R4 i5/OS.



Connecting to System i: System i Access for Web (Information Center)	HTML PDF
System i Access for Web Single Sign-on Using WebSphere SPNEGO Support	PDF
Automating Tasks - HTTPS/SSL	PDF
Configuring an Integrated Web Application Server Instance	PDF

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V5R4

V5R4 iSeries Access for Web is supported on V5R4 and V5R3 i5/OS.



Connecting to iSeries: iSeries Access for Web (Information Center)	HTML PDF
URL Interfaces to V5R4 iSeries Access for Web	PDF

↑ [Back to top](#)

V5R3

V5R3 iSeries Access for Web is supported on V5R3 i5/OS and V5R2 i5/OS.

<http://www.ibm.com/systems/i/software/access/web/doc.html>

i5/OS Software Requirements

Product Number	Product Name	Option	\$
57xx-SS1	V5R3 iSeries Access for Web: V5R2 OS/400 or V5R3 i5/OS V5R4 iSeries Access for Web: V5R3 and V5R4 i5/OS V6R1 System I Access for Web: V5R4 or V6R1 i5/OS	Base	w/HW
57xx-SS1	i5/OS- Extended Base Directory Support	3	N/C
57xx-SS1	i5/OS - AFP Compatibility Fonts	8	N/C
57xx-SS1	i5/OS - Host Servers	12	N/C
57xx-SS1	i5/OS QShell Interpreter	30	N/C
57xx-SS1	<ul style="list-style-type: none"> If you plan to use Secure Sockets Layer (SSL): i5/OS Digital Certificate Manager Cryptographic Access Provider (128-bit) 	34	N/C N/C
57xx-DG1	IBM HTTP Server for i5/OS	Base	N/C
57xx-JV1	Developer Kit for Java Developer Kit for Java Version 1.3 Developer Kit for Java Version 1.4 (or later: Check WebSphere doc for required version)	Base 5 6	N/C N/C N/C
57xx-JC1	Toolbox for Java	Base	N/C
57xx-TC1	TCP/IP Connectivity Utilities for i5/OS	Base	N/C

i5/OS Software Requirements (continued)

Product Number	Product Name	Option	\$
57xx-XW1	System i Access Family	Base	\$
57xx-XH2	System i Access for Web <ul style="list-style-type: none"> • Ships with 57xx-XW1 System i Access Family • V5R3 iSeries Access for Web runs on OS/400 V5R2 and i5/OS V5R3 • V5R4 iSeries Access for Web runs on i5/OS V5R3 and V5R4 • V6R1 System i Access for Web runs on i5/OS V5R4 and V6R1 	Base	part of XW1
57xx-IP1	IBM Info Print Server (Optional -- enables best PDF output: - is not required to view PDF output - is required for V5R3 and V5R4 “PDF Printer” support)	Base	\$

Software Requirements (continued)

Product Number	Product Name	Option	\$
5733-W61 5733-W60 57xx-E51 5733-W51 57xx-IWE 5733-WS5 57xx-DG1 57xx-DG1 * * * *	<p><u>One, or more, of the following web servers</u></p> <ul style="list-style-type: none"> • WebSphere Application Server V6.1 for i5/OS (all three editions) • WebSphere Application Server V6.0 for OS/400 (all three editions) • WebSphere Application Server V5.1 - Express for iSeries • WebSphere Application Server V5.1 for iSeries (Base and ND) • WebSphere Application Server V5.0 - Express for iSeries • WebSphere Application Server V5.0 for iSeries (Base and ND) <ul style="list-style-type: none"> • Apache Software Foundation Tomcat • Integrated web application server <ul style="list-style-type: none"> • WebSphere Portal for iSeries (Express and Express Plus) V5.0.2.2 • WebSphere Portal Enable for Multiplatforms V5.1.0.1 • WebSphere Portal V6.0 • IBM Workplace Services Express V2.5, V2.6 	See documentation	

Refer to the documentation for the individual web serving environments additional requirements that may not be listed above.

- WebSphere <http://www.ibm.com/servers/eserver/series/software/websphere/wsappserver/>
- ASF Tomcat <http://www.ibm.com/servers/eserver/series/software/http/>
- Portal V5.0.2.2 <http://publib.boulder.ibm.com/pvc/wp/502/smbi/en/InfoCenter/index.html>
- Portal V5.1.0.1 <http://publib.boulder.ibm.com/infocenter/wp51help/index.jsp>
- Portal V6.0 <http://publib.boulder.ibm.com/infocenter/wpdoc/v6r0/index.jsp>
- Workplace V2.5 <http://publib.boulder.ibm.com/infocenter/wseic/v2r5/index.jsp>
- Workplace V2.6 <http://publib.boulder.ibm.com/infocenter/wseic/v2r6/index.jsp>

4 CL Commands in System i Access for Web

Example of the CL commands

- **Configure Command example when using WebSphere Application**

Server V5.1 - Express for iSeries

- CFGACCWEB2 -appsvrtype *WAS51EXP -wasinst iwa51exp -appsvr iwa51exp

- **Start Command example when using WebSphere Application**

Server V5.1 - Express for iSeries

- STRACCWEB2 APPSVRTYPE(*WAS51EXP) WASINST(MYINST) APPSVR(*DEFAULT)

- **End Command example when using WebSphere Application**

Server V5.1 for iSeries

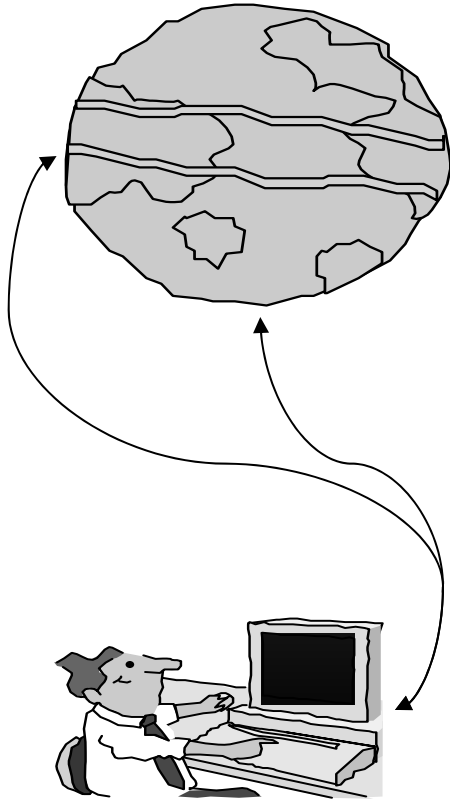
- ENDACCWEB2 APPSVRTYPE(*WAS51) WASINST(DEPTXYZ) APPSVR(*DEFAULT)
- Sometimes you may need to end Access for Web so you can make changes, then start it again.

- **Remove Command**

- The Remove System i Access for Web (RMVACCWEB2) command is used to remove the System i Access for Web configuration from a web application server

Users can now Connect!

- **Open browser**
- **Key in System i url**
- **Prompted for i5/OS user id and password**



Different Ways to Roll Out System i Access for Web

- **Use ‘out of the box’**
 - Set some policies to limit what functions are accessible to your users, and give them the URL address to System i Access for Web
- **Use ‘out of the box’, but set up predefined functions**
 - You can set up preconfigured 5250 sessions that users (or groups of users) can run, can create predefined database requests for users to run, set up commands users can run, etc.
- **Create your own ‘window’ to your system through Access for Web**
 - Add company banners to screens, set up ‘click and link’ tasks that users can perform, set up macros to simplify user access.
- **Use Access for Web with the IBM WebSphere Portal solution**
 - A single unified workspace in which your employees, trading partners, and customers can easily find and use the applications and information that they need

Different Ways to Roll Out System i Access for Web

- Use 'out of the box'
- Use 'out of the box', but set up predefined functions
- Create your own 'window' to your system through System i Access for Web
- Use the WebSphere Portal solution



Home Page entry point

Home Page = *http://<myiseries>:<port>/webaccess/iWAHome*

- **System i Access for Web ‘Home Page’ out-of-the-box view**
- **This page is totally customizable**

New ‘look’ in V5R4...

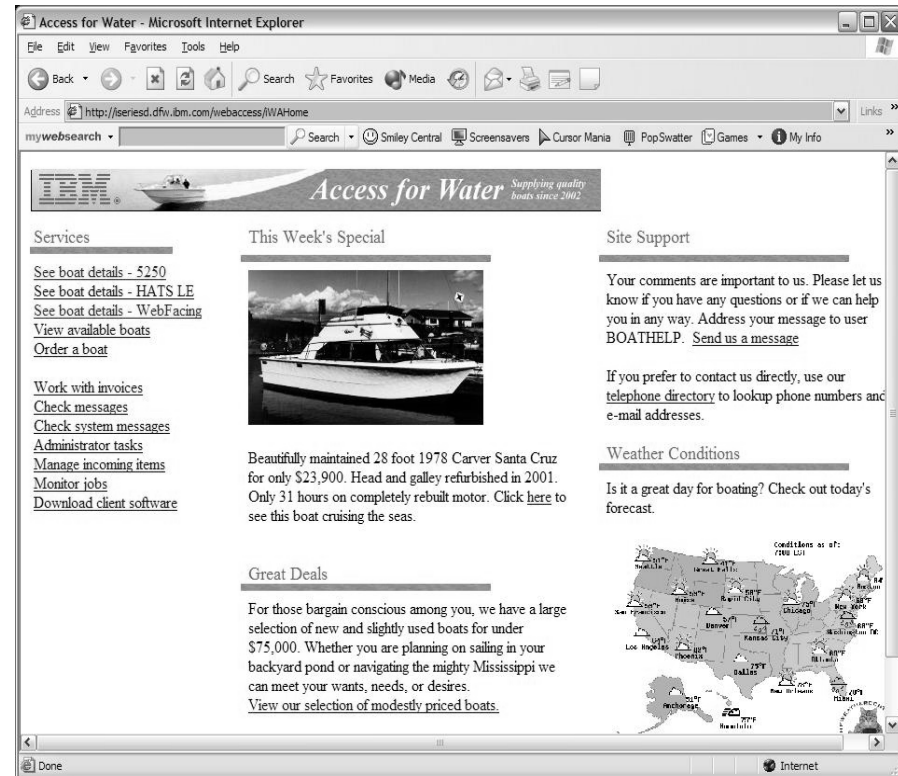
Your Window to your System i

<http://<myiseries>/webaccess/iWAHome>

Customized 'window' to i5/OS

Window is associated with i5/OS user profiles

- An administrator can create multiple different 'windows' based on user profile / group profile for different types of users.
- Can tightly control what functions a user can perform on your iSeries
- Tie in with other web applications (such as WebFacing and HATS) from here as well
- Link to other systems, not just System i



- *One view and set of functions for the Accounting department*
- *Another view and set of functions for the Warehouse staff*

Customized Home Page

Customized view of the Home Page

- Could be used as 'entry' point to iSeries
- Let's drill down and look at some of this...

Address <http://seriesd.dfw.ibm.com/webaccess/iWAHome>

mywebsearch Search Smiley Central Screensavers Cursor Mania PopSwatter Games My Info

Access for Water *Supplying quality boats since 2002*


Services

- [See boat details - 5250](#)
- [See boat details - HATS LE](#)
- [See boat details - WebFacing](#)
- [View available boats](#)
- [Order a boat](#)

Work with invoices

- [Check messages](#)
- [Check system messages](#)
- [Administrator tasks](#)
- [Manage incoming items](#)
- [Monitor jobs](#)
- [Download client software](#)

This Week's Special



Beautifully maintained 28 foot 1978 Carver Santa Cruz for only \$23,900. Head and galley refurbished in 2001. Only 31 hours on completely rebuilt motor. Click [here](#) to see this boat cruising the seas.

Great Deals

For those bargain conscious among you, we have a large selection of new and slightly used boats for under \$75,000. Whether you are planning on sailing in your backyard pond or navigating the mighty Mississippi we can meet your wants, needs, or desires. [View our selection of modestly priced boats.](#)


Site Support

Your comments are important to us. Please let us know if you have any questions or if we can help you in any way. Address your message to user BOATHELP. [Send us a message](#)

If you prefer to contact us directly, use our [telephone directory](#) to lookup phone numbers and e-mail addresses.

Weather Conditions

Is it a great day for boating? Check out today's forecast.



Conditions as of: 7:00 LSJ

Done Internet

➔ <http://seriesd.demos.ibm.com/webaccess/iWAHome>

Using 5250 emulator in System i Access for Web

The company banner, 'Access for Water' is carried forward on all screens

- Went into 'Customize → General' and pointed at file with the company .gif.

5250 emulator in Access for Web

- Application looks better and did no work
- Can use 5250 Bypass Signon (new in V5R4) to bypass i5/OS sign-on screen
- Can use Access for Web Macro support to start the RPG application (BOATS)

Address http://seriesd.dfw.ibm.com/webaccess/WA5250?sessname=boat&initmac=startboat

mywebsearch Search

Access for Water Supplying quality boats since 2002

[Home](#)

AS/400 WSG Boat Demo 8/24/04 15:22:18

Enter your search parameters

Type P=Powered, S=Sailing, T=Tug, C=Commercial, A=All

Length (feet)

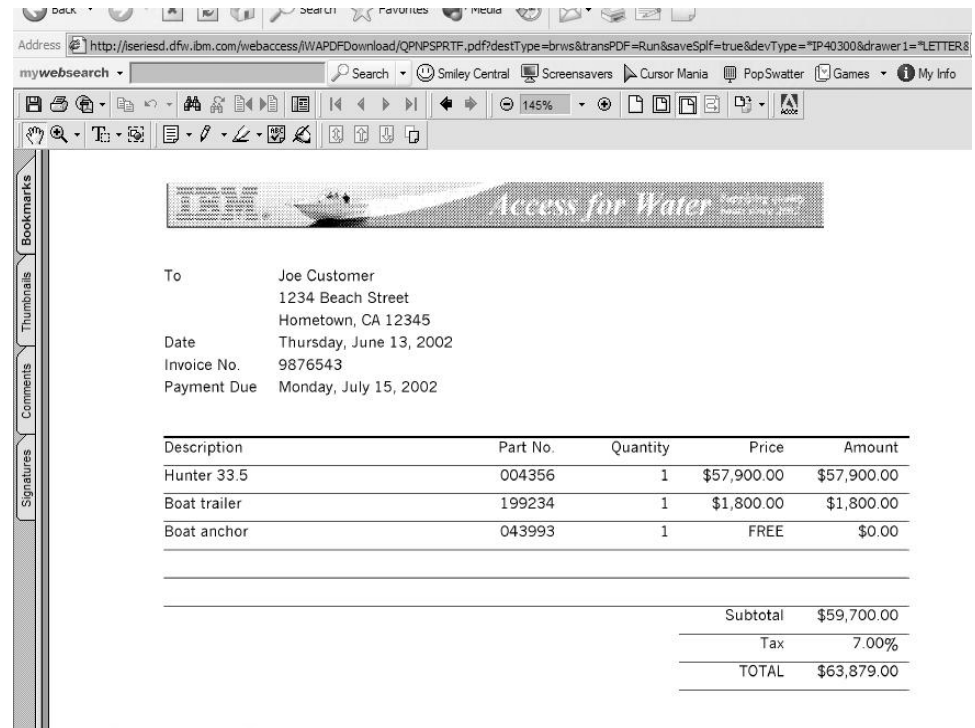
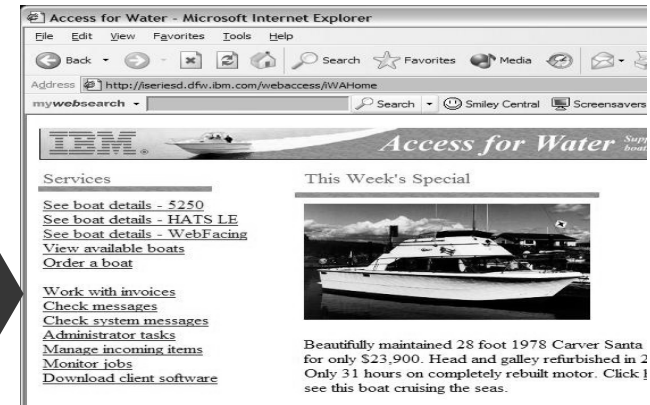
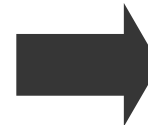
Year built year to start from

Zero (0) extra steps

Task Oriented – not function oriented...

Selected 'work with invoices'

- This takes user to 'Printer Output' – user's Spoolfile printer output
- SCS or AFP printer output is converted to PDF 'on the fly' by Access for Web to PDF
- Since it is now in .PDF format, user can print it to any network printer



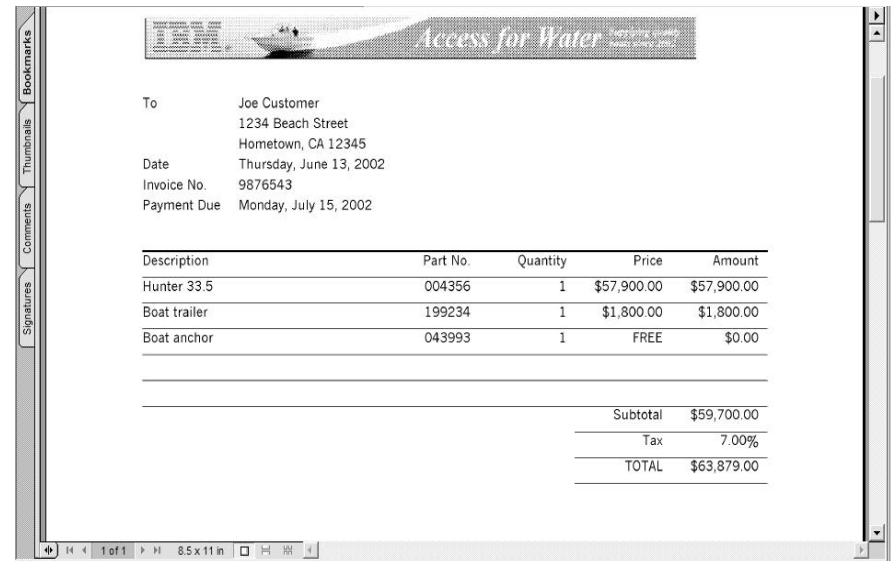
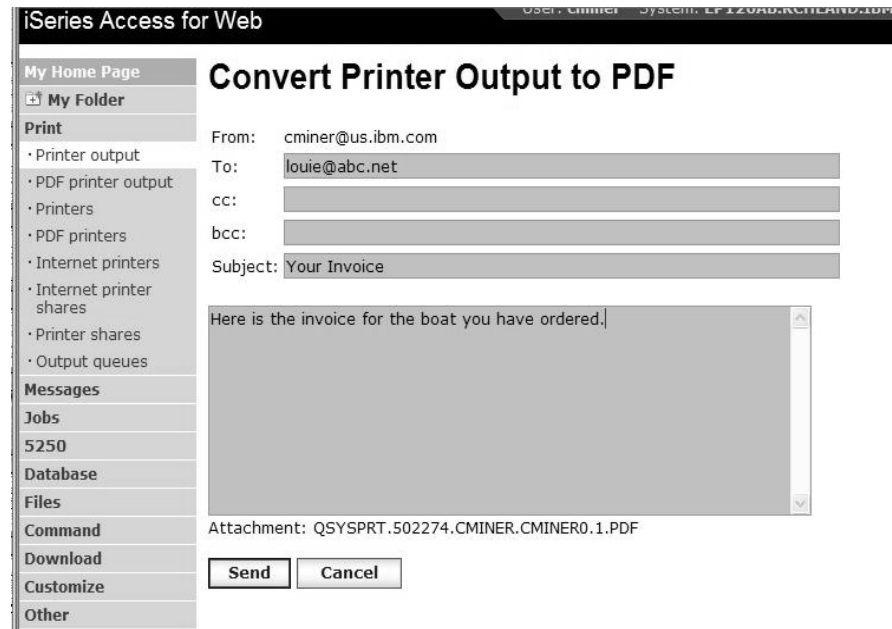
E-mail PDF output

E-mail is integrated with System i Access for Web

- Your mail server can be anywhere in your network
- Users receiving your e-mail need only an e-mail address

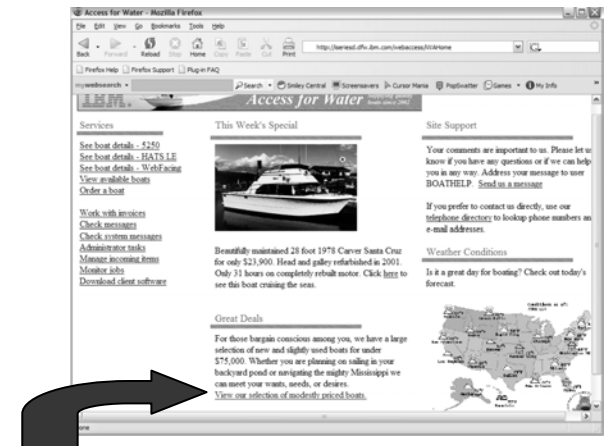
User selects an option in the Printer Output screen to 'e-mail PDF output'

- The PDF document is then included in the e-mail
- Sender's e-mail address filled in; user only needs to address it.



Run an i5/OS Database Query

Clicked on 'View our selection of moderately priced boats'



- Administrator had previously built an SQL Query using the System i Access for Web 'Database' function
- Could also have been set up to show in an .XLS or .PDF format
 - a variety of other output types as well

BNAME	BFEET	BYEAR	BCOST	BNT01
Mako Sportfisher	19	1989	13000	-Located in Anacortes, WA.
Monk Bridgedeck Cruiser	36	1956	19900	-Built of mahogany, oak, and cedar.
Carver Santa Cruz	28	1978	23900	-Constructed of fiberglass.
Bill Garden Schooner	36	1953	27500	-The hull is 1/8' caravel cedar planked atop 1 1/4" x 1 1/2" oak frames
Monk Flybridge/Sedan	34	1985	55000	-Double planked cedar on oak frames.
Hunter 33.5	33	1990	57900	-The boat has a large wheel steering a spade rudder.
Mariner Ketch	40	1979	63000	-Full keel and the rudder is keel hung
Morgan 382 Race/Cruise Sloop	38	1978	69000	-Has an Airex hull and skeg rudder. Has been rated by LLoyd's
Corsair 27	27	1994	69950	-Equipped for cruising and racing

Try out System i Access for Web on a demo server!

Start your browser and connect to the following web site:

<http://iseriesd.demos.ibm.com/webaccess/iWAHome> (case sensitive)

<p>User ID = WACUST</p> <p>Password = demo2pwd</p>	<p>This shows the basic look of System i Access for Web as we ship it. You can try various functions -- including working with printer output, creating database requests, etc. Click on the 5250 tab, sign onto the iSeries, then start an RPG application called BOATS and run it.</p>
<p>User ID = BOATADMIN</p> <p>Password = demo2pwd</p>	<p>This is an example of how a customer might design a web page for their use. You will see that an end user could start the same BOATS application by clicking on the 5250 session, or they could have used HATS to run the application. You will also see other links that would let a user work with spooled file information, work with IFS, run database requests, etc..</p>

Send email to: LLHIRSCH@us.ibm.com to reset the user profiles if either gets disabled.

More Documentation...

Article describing how 'Access for Water' web page was built

Go to the System i Access Family web page at:

www.ibm.com/systems/i/software/access/web/articles.html

- Find article written Jan/Feb 2003 entitled 'Build a Quick and Easy Web Site with iSeries Access for Web' (PDF version)
- Updated Oct 2006 in System i News 'Tailor iSeries Access for Web'

Weber on CA/400

Weber on CA/400

- Who will benefit? iSeries managers and developer administrators who want to Web-enable their iSeries applications.
- What you'll learn: Weber's step-by-step article details how shops can use iSeries Access for the Web to provide browser-based access to iSeries applications and data. Because iSeries Access for Web is implemented as a set of Java servlets that run on the iSeries server, only a browser is required on the client.
- Bottom line: If your iSeries server is part of your company's Internet, you can use iSeries Access for Web to provide access to your resources for others within your company. If your iSeries server is part of the Internet, you can use iSeries Access for Web to provide access to your resources for your customers and suppliers. In this case, you also need to provide your customers and suppliers with a user profile to access your iSeries server. Regardless, through iSeries Access for Web, iSeries shops can extend their host applications and data to a browser-based environment and give both users and business partners access over the Web.

Build a quick and easy Web site with iSeries Access for Web

by Janet Weber

You can build a quick and easy Web site for your company with the customization support of iSeries Access for Web. No Java programming is required. You simply create HTML files and set configuration options. In this article, I demonstrate this capability by creating a Web site to sell books. This information is based on the functionality available with the V5R2 release of iSeries Access for Web. First introduced by IBM in September 2001, it provides a browser interface to iSeries resources, such as DB2 UDB, printer output, and CR/400 CL commands.

Home page and template files

iSeries Access for Web ships a default home page. This page is displayed when you access the home page URL `http://<system>/webaccess/WAHome`. The default home page is stored in the iSeries integrated file system in the following location: `/QIBM2/ProdData/Access/WA2/html/homepage.html`

iSeries Access for Web also ships a default template file. The template file contains the HTML source displayed at the top and bottom of each iSeries Access for Web content page. The location of the default template file is `/QIBM2/ProdData/Access/WA2/html/webaccess.html`. The V5R2 release in the template file new replacement tags. We will discuss these later in the article.

First of all, we need to create a customized home page and a customized template file. We do not want to modify or update the files under `/QIBM2/ProdData` since this directory tree is intended only for product files. Instead, we create a new directory named `/books/homepage` and place our files in it. Our customized home page contains links to view and order books. Our customized template file contains the company's logo. We discuss details of the file contents later in the article.



Janet Weber
Janet Weber is an industry software engineer in the IBM Rochester, Minnesota laboratory. She has had a variety of roles on the DC Support, Client Access, and iSeries Access products. Her focus has been on programming in Java. Janet is currently a member of the iSeries Access for Web development team.

Different Ways to Rollout Access for Web

- Use 'out of the box'
- Use 'out of the box', but set up predefined functions
- Create your own 'window' to your system through Access for Web
- Use the WebSphere Portal solution



System i Access for Web has many entry points

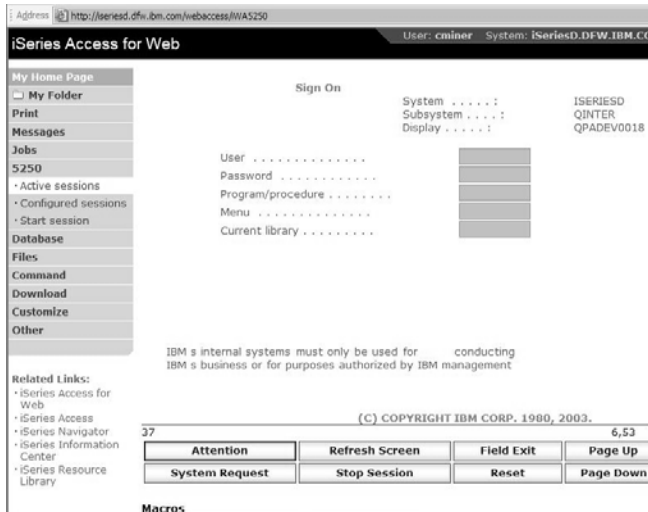
'URL Interfaces to System i Access for Web' manual available on the web

<http://<myiseries>/webaccess/iWAMain>

- Can enter at many different pages

- Can use navigation bar to move from function to function

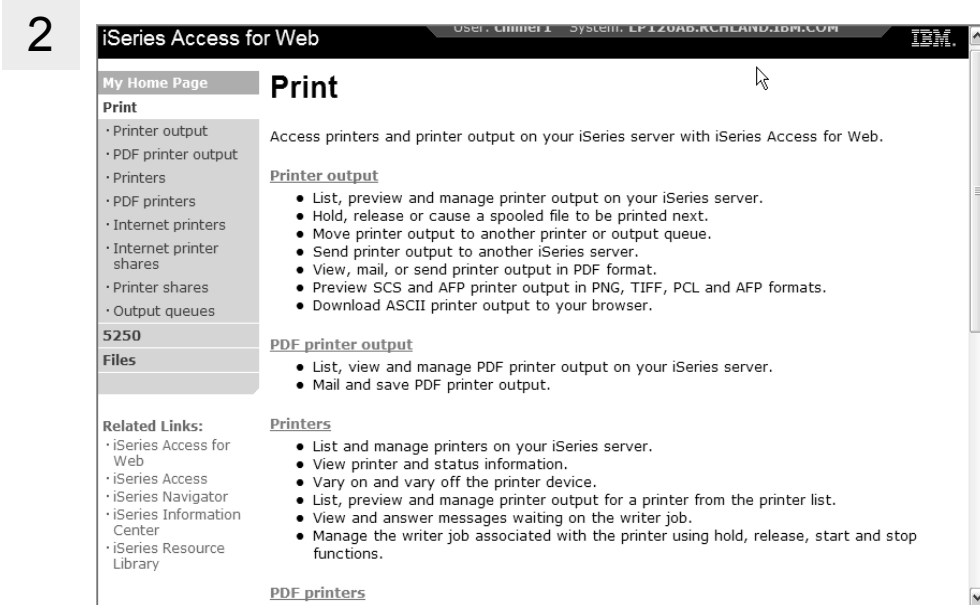
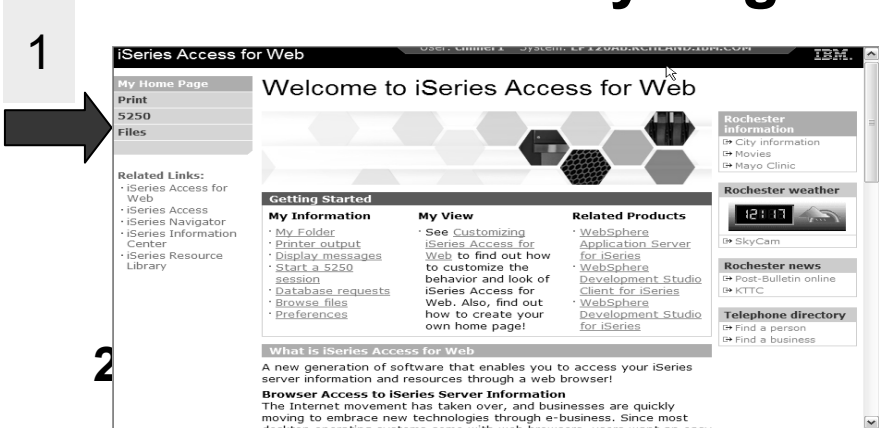
<http://<myiseries>/webaccess/iWA5250>



<http://<myiseries>/webaccess/iWASpool>

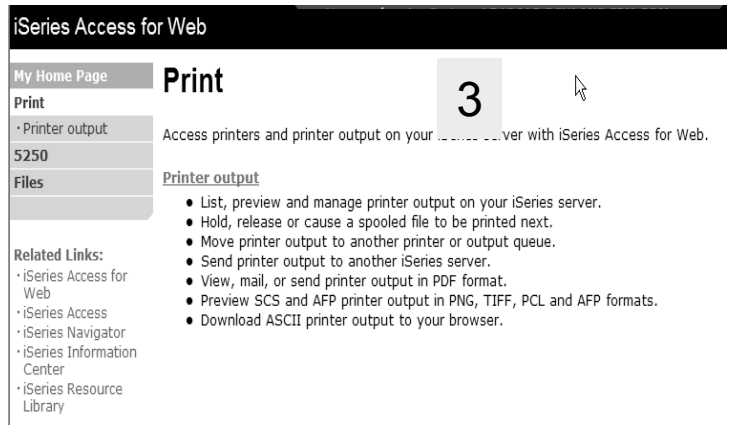
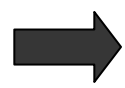


Reduce functions you give to users



Reduce tabs that get displayed

Reduce options under tabs



Printer Output - Spoolfile

1. Print Tab

- User only has one option available, i.e. 'Printer output'

2. Default look of 'Printer Output'

3. Customized look of 'Printer Output' for signed on user

- Removed many of the columns of printer output
- Reordered list
- Removed several end user actions

1

The screenshot shows the 'Print' tab in the iSeries Access for Web interface. The left sidebar contains 'My Home Page', 'Print', '5250', and 'Files'. The main content area is titled 'Print' and contains the text: 'Access printers and printer output on your iSeries server with iSeries Access for Web.' Below this, there is a section for 'Printer output' with a bulleted list of actions: 'List, preview and manage printer output on your iSeries server.', 'Hold, release or cause a spooled file to be printed next.', 'Move printer output to another printer or output queue.', 'Send printer output to another iSeries server.', 'View, mail, or send printer output in PDF format.', 'Preview SCS and AFP printer output in PNG, TIFF, PCL and AFP formats.', and 'Download ASCII printer output to your browser.' There are also 'Related Links' for various iSeries services.

2

The screenshot shows the 'Printer Output for cminer' view. It features a table with the following columns: File Name, User, Creation Date/Time, Pages Per Copy, Copies, Status, Action, User, Job Name, Job Number, and File Name. The table contains several rows of printer output data, including entries for QSYSVRT and QPRINT jobs.

File Name	User	Creation Date/Time	Pages Per Copy	Copies	Status	Action	User	Job Name	Job Number	File Name
QSYSVRT		12/15/05 4:31 PM	1	1	Ready	[Icons]	CMINER	CMINERO	502274	
QSYSVRT		12/15/05 4:31 PM	1	1	Ready	[Icons]	CMINER	CMINERO	502274	
QSYSVRT		12/15/05 4:32 PM	1	1	Ready	[Icons]	CMINER	CMINERO	502274	
QSYSVRT		12/15/05 4:39 PM	1	1	Ready	[Icons]	CMINER	CMINERO	502274	
QPRINT		12/15/05 4:48 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502281	
QPRINT		12/15/05 4:50 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502285	
QPRINT		12/15/05 4:52 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502287	
QPRINT		12/15/05 4:57 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502291	

3

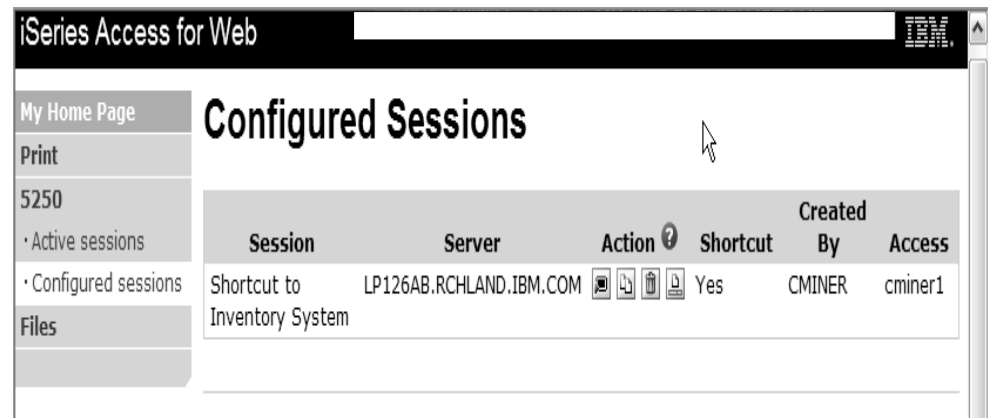
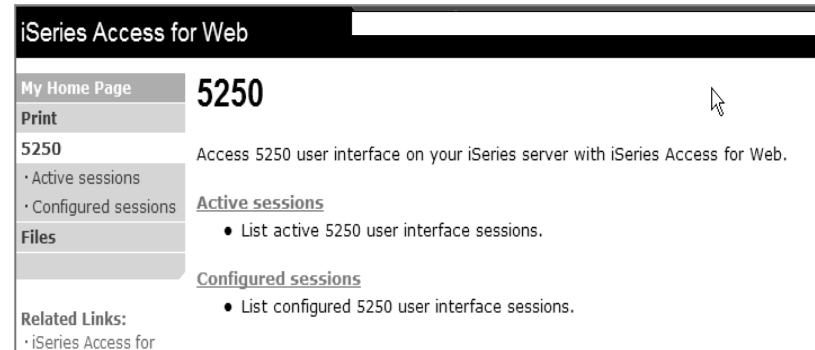
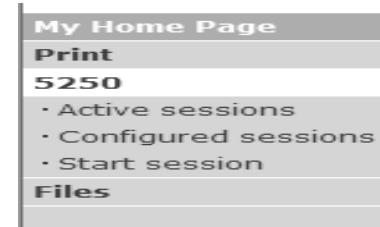
The screenshot shows the 'Printer Output for cminer1' view, which is a customized version of the previous view. The table has a simplified structure with columns: File Name, Job Name, Creation Date/Time, Pages Per Copy, User, Priority, and Action. The data is filtered to show only jobs for user 'cminer1'.

File Name	Job Name	Creation Date/Time	Pages Per Copy	User	Priority	Action
QPJOBLOG	CMINER10	12/16/05 6:23 PM	2	CMINER1	5	[Icons]
QPJOBLOG	CMINER13	12/16/05 10:23 PM	2	CMINER1	5	[Icons]
QSYSVRT	CMINER10	12/19/05 10:33 AM	1	CMINER1	5	[Icons]
QSYSVRT	CMINER10	12/19/05 10:33 AM	1	CMINER1	5	[Icons]
QSYSVRT	CMINER10	12/19/05 10:33 AM	1	CMINER1	5	[Icons]

Run Pre-configured 5250 Sessions

You want to limit users to only starting 5250 sessions that you have preconfigured

- You have removed user's ability to configure a session
- User selects 'Configured Sessions'
 - Only one listed, only action user can perform is to 'start' it
- User clicks on Start



User can run 5250 application

User is placed in this application

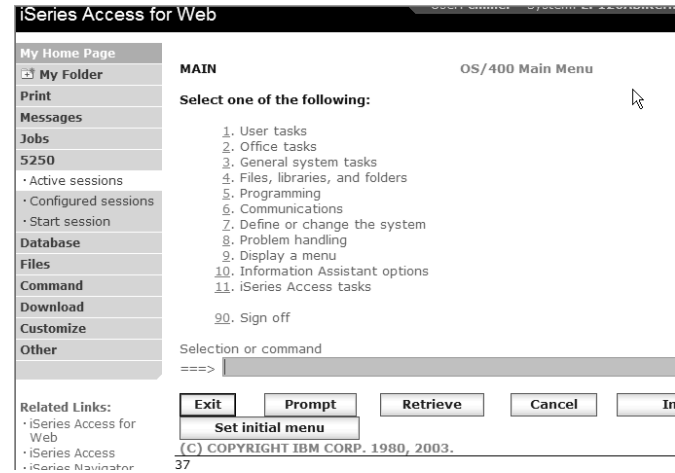
- The session could be configured to include a macro to put the user directly into a specific application on the System i
 - Or on a menu screen
- Use CHGUSRPRF, LMTCPB=Yes to remove command line from user's screen



Change look of 5250 session

1

1. Default 'web' look



2. Changed colors, added keypad at side, changed buttons at bottom to words

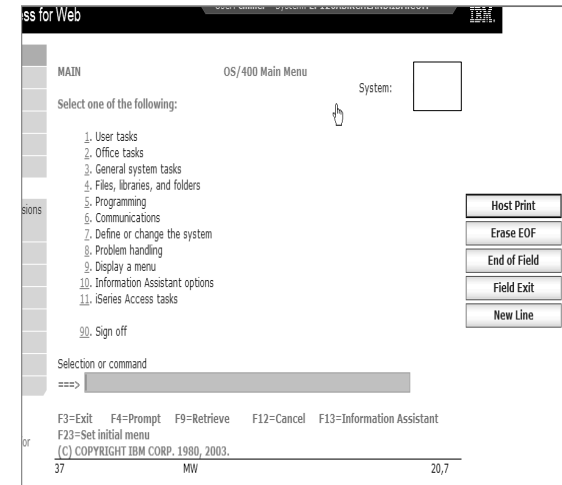


2

3. Removed navigation bar, put keypad on top



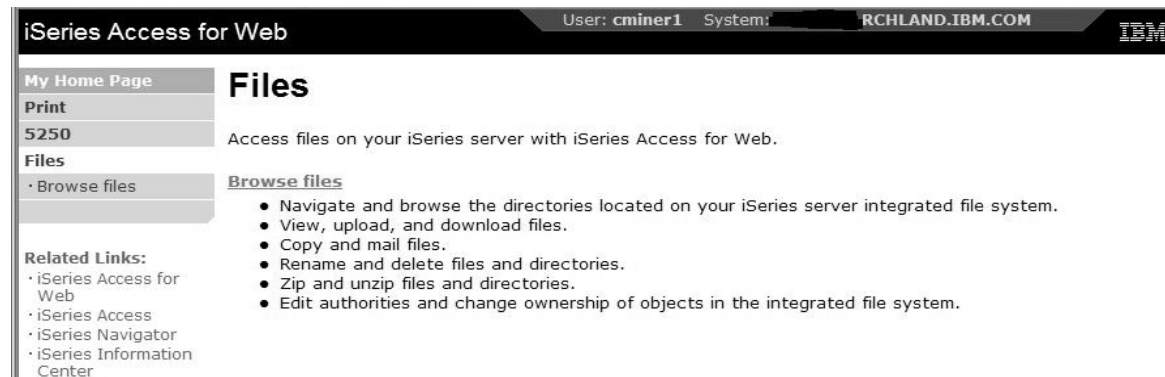
4. Selected 'traditional' view, removed navigation bar



3

Work with Files in the IFS

- **Navigate and browse the directories located on your iSeries server integrated file system**
 - **Don't need to map drives**
 - **Don't need to know directory structures**



- **View, upload, and download files**
- **Copy and mail files**
- **Rename and delete files and directories**
- **Zip and unzip files and directories**
- **Edit authorities and change ownership of objects in the integrated file system**

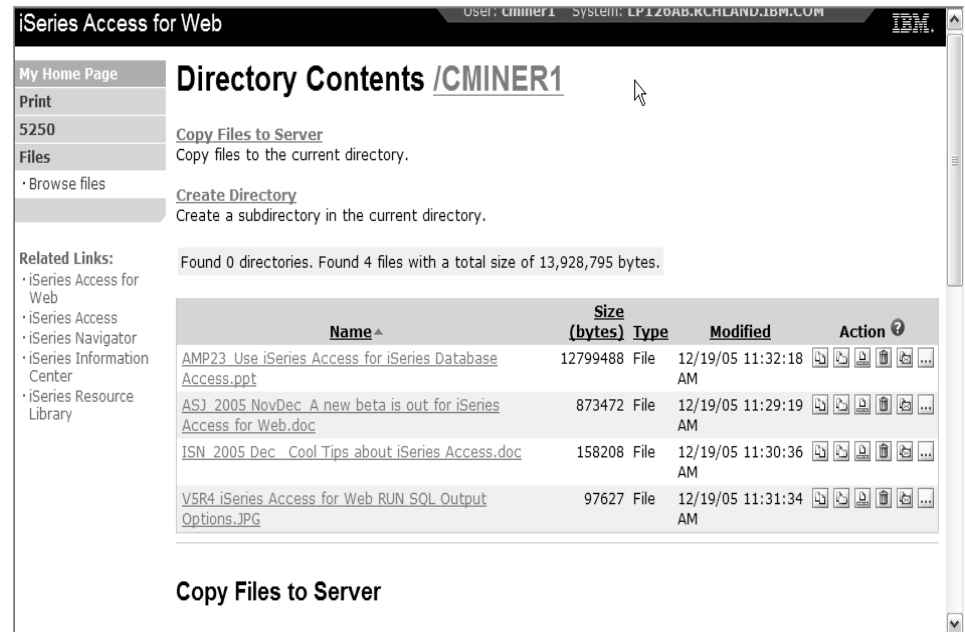
Browse Files - 'Filtered View'

When I click on 'Browse Files', I see only a directory called 'cminer1' and its content

- Because the administrator set a 'Default Directory' policy for me

Actions I can perform:

- Subdirectories: Create new ones, Rename, Work with
- Files: Copy, Rename, Delete, Mail, Work with (ie, Zip, Unzip, etc)



Different Ways to Rollout System i Access for Web

- Use 'out of the box'
- Use 'out of the box', but set up predefined functions
- Create your own 'window' to your system through Access for Web



- Use the WebSphere Portal solution

Portal Solutions – the next wave in technology

For most organizations, the decision to invest in an enterprise portal is not a question of “if,” but “when”?

(Craig Roth, VP META Group, 6/3/03)



Portal built on i5/OS

WebSphere Portal Administration Edit my profile ?

Welcome My Work My Finances My Newsroom My iSeries My Favorites

My Page

IBM.

v5

Welcome to WebSphere Portal version 5.0

To rearrange portlets on this page, click the **Show tools** icon. This action produces tools that allow you to arrange and remove portlets. Click **Edit page** to add new portlets or change page layout.

To create a page, click **New page**.

Bookmarks

- WebSphere Portal home
- WebSphere Portal Zone
- WebSphere Portal catalog
- WebSphere Portal product documentation
- WebSphere Portal support
- WebSphere Portal offerings

My Vertical News

"Iraq al-Qaeda link" - 15 Islamists are arrested in Spain

A handcuffed suspect is led away by members of the Spanish Police following a raid against suspected members of a radical ...

World News (includes photo)

- "Iraq al-Qaeda link" - 15 Islamists are arrested in Spain
- U.S. releases some Saddam-era detainees
- Israel's Sharon suffers minor stroke
- Baghdad hospital car bomb kills two

US News (includes photo)

- Unrest in Congress over Bush's wiretaps
- Secretary of State defends NSA spying
- Time honors three who live to give
- NYC transit strike begins

Market & Economy News

- Late shoppers get benefit of bargaining

My Stocks

Monday, December 19, 2005 1:31:00 PM EST

▲ IBM	83.48	0.11	0.13
▼ \$COMPO	2,235.15	-17.33	-0.77
▲ \$DJI	10,900.56	24.97	0.23
▼ \$SPX	1,263.98	-3.34	-0.26

Data delayed at least 20 minutes.

Get Quote Symbol Lookup

MarketWatch © MarketWatch, Inc. 2005
Intraday data provided by ComStock, an Interactive Data Company.

My Weather

Monday, December 19, 2005 5:18:00 PM EST

	Raleigh, North Carolina	48°
	Partly Sunny	24°/50°
	Stuttgart, Germany	30°
	Snow	24°/36°
	Beijing (Peking), China	23°
	Partly Cloudy	17°/30°
	Tokyo, Japan	36°
	Clear	31°/41°

System i Access for Web Portlets on System i Portal

The screenshot displays the System i Portal interface. At the top, there is a navigation bar with 'WebSphere Portal' on the left and 'My Portal Administration', 'Edit my profile', and 'Log out' on the right. Below this is a secondary navigation bar with 'Welcome', 'My Work', 'My Finances', 'My Newsroom', and 'My iSeries' (circled in black). To the right of this bar are links for 'New Page', 'Edit Page', and 'Assign Permissions', and a 'My Favorites' dropdown menu.

The main content area is divided into two panes. The left pane, titled 'iSeries 5250 Session', contains a 'Start Session' form. The form includes fields for 'Server' (x1519p4.rchland.ibm.com), 'Port' (23), and 'Code page' (37). There are checkboxes for 'Display HTML data in fields', 'Use user ID' (selected), 'Specify workstation ID', 'Avoid duplicates for this user', and 'Avoid duplicates with other users' (checked). A 'Start Session' button is at the bottom of the form.

The right pane, titled 'Welcome', contains a welcome message and a list of 'iSeries Access portlets include the following:':

- 5250 portlet
 - Run commands and access full-screen 5250 character-based applications.
- IFrame portlet
 - Access any of the iSeries Access for Web servlets using the IFrame portlet.
- Integrated file system (IFS) browsing portlets
 - Browse the iSeries integrated file system.
 - View, edit, upload and download files.
- Printers, printer output, and output queues portlets
 - View printer status, start and stop the writer job associated with a printer.
 - Hold, release, print, delete and view printer output files.
 - Move printer output files to another output queue or printer.
 - Hold and release output queues.
- Database tables and SQL portlets
 - View database tables, add and update records.
 - View query results, customize format of results.
 - Run SQL statements dynamically.
- Commands portlets
 - Run CL commands.

At the bottom of the right pane, there is a paragraph of text: 'The iSeries Access portlets are included with iSeries Access for Web. The iSeries Access for Web product is part of the iSeries Access Family (5722-XW1). For more information regarding iSeries Access, iSeries Access for Web, and the iSeries Access...'

Portlet Support added to System i Access for Web

V6R1	V5R4	V5R3 PTF SI11914 (May 2004)	V5R3 (Jan 2004)
<ul style="list-style-type: none"> • New portal application: “Standard portal application” <ul style="list-style-type: none"> – Written to the Java Specification Requests (JSR) 168 Portlet Specification – Strategic System i Access for Web portal offering • Original portlets, “IBM portal application,” are still available 	<ul style="list-style-type: none"> • Single Sign-on (SSO) <ul style="list-style-type: none"> – Via WAS Security model – 5250 Bypass signon option • Database <ul style="list-style-type: none"> – OpenOffice spreadsheet format (.ods) – iSeries SQL Requests – Viewer to look at iSeries SQL results • Files <ul style="list-style-type: none"> – Zip function to zip files in IFS • iSeries Credentials <ul style="list-style-type: none"> – Users can change i5/OS password via System i Access for Web, and it will additionally update currently defined credentials with the new password value. 	<ul style="list-style-type: none"> • File • Print • Database • Command • Credentials • Related Links 	<ul style="list-style-type: none"> • 5250 • iFrame • Welcome

Different Ways to Rollout Access for Web

- **Use 'out of the box'**
- **Use 'out of the box', but set up predefined functions**
- **Create your own 'window' to your system through Access for Web**
- **Use the WebSphere Portal solution**



Control user access to functions



1. How do I keep my users from using all these functions?
2. How do I set up the environment for my users?
3. Should I let my users set have some individual screen settings for some functions?

You need *SECADM authority to customize profiles

System i Access for Web uses i5/OS User Profiles

When an System i Access for Web user attempts to access any function on the iSeries, the following sequence of checks are made to authenticate user access:

- User profile
- Group profile(s)
- *PUBLIC profile

***PUBLIC profile is the set of default policy settings shipped with Access for Web**

- The defaults allow most functions to be available to all users

The settings in these policies indicate what functions within System i Access for Web, a user can attempt to use.

- For Example: Let's say you give users full access to the 'Database' tab.
- You have Object Level authority set up on your data
- When a user attempts to use one of the System i Access for Web Database GUIs to get at the database information, the user will get an i5/OS message indicating they are not authorized to access data

Customize → Policies

Policies are used to control access to System i Access for Web functions

For example:

- **A Files access policy can be set to Deny or restrict a user or group from accessing the file function.**
- **Policies are saved and associated with the appropriate iSeries user or group profile.**
- **Each 'Category' expands for granular control**

Policies
Profile: **CMINER1**

Action	Category	Description	Access
	5250	5250 user interface custom settings.	Allowed
	Command	Run batch command custom settings.	Allowed
	Customize	Preferences and policy administration custom settings.	Allowed
	Database	Database tables, requests, and run SQL custom settings.	Allowed
	Database connections	Create and edit database connection definitions.	Allowed
	Download	Download packages custom settings.	Allowed
	Files	Integrated file system and file share custom settings.	Allowed
	General	Page layout, language and character set custom settings.	Allowed
	Jobs	Work with jobs custom settings.	Allowed
	Mail	Send mail custom settings.	Allowed
	Messages	Display messages, send messages, and message queue custom settings.	Allowed
	My Folder	My Folder custom settings.	Allowed
	Print	Printer output, printers, printer shares and output queue custom settings.	Allowed
	Sametime	Lotus Sametime custom settings.	Allowed
	Other	Change password and other miscellaneous custom settings.	Allowed

Related Links:
[iSeries Access for Web](#)
[iSeries Access](#)
[iSeries Navigator](#)
[iSeries Information](#)

Policies - customize for all users at once

One alternative...



Use the ***PUBLIC** group profile and set policies for all users

- 'Deny' functions for all users in a single step
- Then 'Allow' specific users access to functions via their User or Group profiles

Problem:

You're locked out too, until you go in and "Allow" functions to yourself

iSeries Access for Web User: cminer System: RCHLAND.IBM.COM

My Home Page

My Folder

Print

Messages

Jobs

5250

Database

Files

Command

Download

Customize

• Preferences

• Policies

• Settings

• Transfer configuration

Other

Related Links:

- iSeries Access for Web
- iSeries Access
- iSeries Navigator
- iSeries Information

Policies

Profile: ***PUBLIC**

Action	Category	Description	Access
	5250	5250 user interface custom settings.	Allowed
	Command	Run batch command custom settings.	Allowed
	Customize	Preferences and policy administration custom settings.	Allowed
	Database	Database tables, requests, and run SQL custom settings.	Allowed
	Database connections	Create and edit database connection definitions.	Allowed
	Download	Download packages custom settings.	Allowed
	Files	Integrated file system and file share custom settings.	Allowed
	General	Page layout, language and character set custom settings.	Allowed
	Jobs	Work with jobs custom settings.	Allowed
	Mail	Send mail custom settings.	Allowed
	Messages	Display messages, send messages, and message queue custom settings.	Allowed
	My Folder	My Folder custom settings.	Allowed
	Print	Printer output, printers, printer shares and output queue custom settings.	Allowed
	Sametime	Lotus Sametime custom settings.	Allowed
	Other	Change password and other miscellaneous custom settings.	Allowed

Example: Set Policy to Default to Specific Directory in IFS

Set a 'Default Directory' for:

- *PUBLIC
- Groups of users
- Specific user

Profile: CMINER1

Policy	Derived From	Action	Setting
Files access	Shipped default	Use current setting	Allow
Files tab	Shipped default	Use current setting	Show
Display directory contents in new window	Shipped default	Use current setting	No
Enable sort links for directory contents	Shipped default	Use current setting	Yes
Display directory contents statistics	Shipped default	Use current setting	Yes
Browse files	Profile setting	Use current setting	Allow
Copy files to server	Shipped default	Use current setting	Allow
Copy files from server	Shipped default	Use current setting	Allow
Default directory	Profile setting	Use current setting	/cminer1
Display subdirectory contents	Shipped default	Use current setting	Allow
Display parent directory contents	Shipped default	Use current setting	Allow
Display default directory	Shipped default	Use current setting	Deny

In this example, I went into CMINER1 profile, and set policy to show only the 'CMINER1' directory to this user...



System i Access for Web 5250 Interface

Runs as an interactive job

- Only function in System i Access for Web that is interactive

TN5250 port

- Only function in System i Access for Web that uses TN5250 port

The screenshot displays the System i Access for Web 5250 interface. On the left is a vertical navigation menu with items: My Home Page, My Folder, Print, Messages, Jobs, 5250 (with sub-items: Active sessions, Configured sessions, Start session), Database, Files, Command, Download, Customize, and Other. The main content area is titled 'MAIN i5/OS Main Menu' and shows 'System: LP016AB'. It prompts the user to 'Select one of the following:' and lists 11 numbered options: 1. User tasks, 2. Office tasks, 3. General system tasks, 4. Files, libraries, and folders, 5. Programming, 6. Communications, 7. Define or change the system, 8. Problem handling, 9. Display a menu, 10. Information Assistant options, 11. iSeries Access tasks, and 90. Sign off. Below the list is a text input field for 'Selection or command' with '===>' on the left. A row of buttons includes Exit, Prompt, Retrieve, Cancel, and Information Assistant. A 'Set initial menu' button is also present. A copyright notice '(C) COPYRIGHT IBM CORP. 1980, 2005.' is shown. At the bottom, there are two rows of buttons: the first row has Attention, Refresh Screen, Field Exit, Page Up, and Enter; the second row has System Request, Stop Session, Reset, and Page Down. A 'Macros' section at the bottom shows a dropdown menu with 'Shortcut to My macro for *PUBLIC' and a 'Play Macro' button, along with a 'Start Recording' button.

Use “Start Session” Dynamically

- Specify the system to connect
- Select the session attributes
 - Port, code page, workstation ID, etc.
- Start session

My Home Page

- My Folder
- Print
- Messages
- Jobs
- 5250
 - Active sessions
 - Configured sessions
 - Start session
- Database
- Files
- Command
- Download
- Customize
- Other

Start Session

Server ?

Server:

Port:

Code page: ▼

Workstation ID ?

Use user ID

Specify workstation ID

Avoid duplicates for this user

Avoid duplicates with other users

General ?

Initial macro: ▼

Bypass signon

Display HTML data in fields

Start Session

Related Links:

- iSeries Access for Web
- iSeries Access

Start a Configured Session

- Configured sessions list shows the list of sessions for the logged in user
- Select the “Start” icon for the session to start

My Home Page

My Folder

Print

Messages

Jobs

5250

- Active sessions
- Configured sessions
- Start session

Database

Files













Command

Download

Customize

Other

Configured Sessions

Session	Server	Action ?	Shortcut	Created By	Access
system A	LP016AB.RCHLAND.IBM.COM	     	No	smshao	smshao
system B	LP016AB.RCHLAND.IBM.COM	     	No	smshao	smshao

[Configure new session](#)
Configure a new session.

[Shortcuts to sessions you configured](#)
Display a list of shortcuts to sessions you configured. Shortcuts can be deleted from this list.

[Active sessions](#)
Work with your active sessions.

[Start session](#)
Start a new session.

[My macros](#)
Work with your macros.

[My keypads](#)
Work with your keypads.

Run Pre-Configured 5250 Sessions

You can limit users to connecting to only specific systems or running only specific applications.

`http://<systemi>:<port>/webaccess/iWAMain`

- Create preconfigured 5250 sessions
- Then set policies to restrict users to only preconfigured sessions
- User selects 'Configured Sessions'
 - Only link provided
 - User has only one action → to start a session

The screenshot shows the 'iSeries Access for Web' interface. The user is logged in as 'adams' on the 'System' for 'RCHLAND.IBM.COM'. The main content area is titled 'Configured Sessions' and contains a table with the following data:

Session	Action	Shortcut	Created By	Access
Shortcut to demo		Yes	smshao	*PUBLIC
Shortcut to Payroll		Yes	cminer	*PUBLIC

Below the table, there are several related links and descriptions:

- [Shortcuts to sessions you configured](#): Display a list of shortcuts to sessions you configured. Shortcuts can be deleted from this list.
- [Active sessions](#): Work with your active sessions.
- [My macros](#): Work with your macros.
- [My keypads](#): Work with your keypads.
- [5250 user interface help](#): View help for working with configured sessions.

5250 Environment: Windows PC5250 v. Web 5250

System i Access for Windows:



*User input ,
Interaction with 5250 session,
display update
running in Windows OS*

System i Access for Web:



HTTP



HTTP
Server
(Apache)



Application
Server
(WebSphere,
Tomcat)



TN5250,
sockets



System i Access
Servers,
5250 application,
Database,
Files,
Printer output

Things to know

Because of the architecture on the previous chart—that 5250 session is implemented using HTML and that the 5250 session is separate from the user input and display update-- here are considerations:

- Not intended to replace full function emulators like PC5250, Host On Demand, etc. for purposes of "heads-down" data entry type of operations
 - Does not include graphics, EHLAPPI, DDE functionality
 - Does not provide keyboard mapping
 - Does not support certain keys the way PC5250 does (i.e., Field Exit)
- Does not include Printer Emulation (push to printer)
 - i5/OS strategy is Internet Printing Protocol (IPP) printing
 - System i Access for Web provides capability to convert spooled files to PDF
- No direct interaction with server, so unsolicited server messages can't be received.
 - Need to request refresh to see break messages
- Does not include file transfer from session



System i Access for Web – Database Functions

Access database tables on your iSeries server with iSeries Access for Web.

Tables

- View a list of database tables on your iSeries server.
- Perform actions on these tables without having knowledge of SQL and its syntax.
- View the contents of a table in a paged list, using the Quick view action.
- Add and update records in a table using the Insert and Update actions.
- Create your own customized SQL request for a table using the Run SQL action.
- Create your own customized copy data request for a table using the Copy data to table action.

My requests

- View a list of previously saved requests.
- Run or Edit requests from this list.
- Manage lists using the Copy, Delete, and Rename actions
- Create and manage shortcuts to requests

Run SQL

- Run SQL statements dynamically.
- View output as a paged list or in a popular file format, like Microsoft Excel or Lotus 1-2-3. (Output format depends on how you have your browser configured and whether the browser can locate a plug-in for the output type you choose.)
- Customize how data is returned by setting options specific to the output type.
- Build SELECT statements using an SQL Wizard.
- Save requests for repeated use.

Copy data to table

- Copy existing data files from your PC to a database table on your iSeries server.
- These data files can be in many popular file formats, including Microsoft Excel and Lotus 1-2-3.
- Replace the contents of a table or add data to an existing table.
- Create a new database table based on the contents of a workstation file.
- Save requests for repeated use.

Import request

- Import Client Access Data Transfer upload and download requests into iSeries Access for Web copy data and SQL requests.
- Imported requests are automatically converted to iSeries Access for Web format.
- Run and edit converted requests on your iSeries server just like other copy data and SQL requests.

Import query

- Import queries generated by Query for iSeries and DB2 UDB for iSeries Query Manager.
- Imported queries can be saved into iSeries Access for Web database requests.
- Run and edit converted queries on your iSeries server just like iSeries Access for Web SQL requests.

Extract server data

- Extract server object information into a database table.

Upload PC Data to the System i

- Upload data from a variety of file types
 - Excel, XML, Lotus, etc
 - OpenOffice new V5R4
- Put into iSeries database
 - 'Replace' contents of table
 - 'Append' to existing data
- If no table exists on the iSeries, you will get a wizard to help you create a new table



iSeries Access for Web

Copy Data to Table

My Home Page
 My Folder
 Print
 Messages
 Jobs
 5250
 Database
 · Tables
 · My requests
 · Run SQL
 · Copy data to table
 · Import request
 · Import query
 · Extract server data
 Files
 Command
 Download
 Customize

File to Copy

File: Browse...

File type: Comma Separated Value (.csv) Settings

Table to Receive Data

Table:

Action: Replace data if table exists

Connection

Connection: IBM Toolbox for Java - LP126AB.RCHLAND.IBM.COM

Copy Data to Table Save Request...

Create System i Table

iSeries Access for Web User: CMINER System: LP116AB

Copy Data to Table

Table BOATS.DATA does not exist.

Create options

View or change column definitions before creating table

Create table using the source file's column definitions

- My Home Page
- My Folder
- Print
- Messages
- Jobs
- 5250
- Database
 - Tables
 - My requests
 - Run SQL

Wizard to help you create an iSeries table from your PC spreadsheet

Copy Data To Table [LP116AB.RCHLAND.IBM.COM] - Mozilla Firefox

http://p116ab:2016/webaccess/iWADbUpload

iSeries Access for Web
cminer LP116AB.RCHLAND.IBM.COM

Table Column Definitions

Verifying column definitions before creating the table is recommended. You can change any of the column definition attributes before clicking Create Table.

Column	Description	Type	Length	Scale	Sample Data
EMPNO		CHAR	6	0	200340
FIRSTNME		CHAR	9	0	ROY
MIDINIT		CHAR	1	0	R
LASTNAME		CHAR	10	0	ALONZO
WORKDEPT		CHAR	3	0	E21
PHONENO		CHAR	4	0	5698
HIREDATE		CHAR	8	0	5/5/47
JOB		CHAR	8	0	FIELDREP
EDLEVEL		FLOAT	0	0	16.0
SEX		CHAR	1	0	M
BIRTHDATE		CHAR	8	0	1/1/01
SALARY		FLOAT	0	0	23840.0
BONUS		FLOAT	0	0	500.0
COMM		FLOAT	0	0	1907.0

Database Tables

You can:

- Insert
- Update
- Quick View
- Find (new V5R4)
- Run SQL
- Copy Data to Table

iSeries Access for Web User: CMINER

My Home Page

- My Folder
- Print
- Messages
- Jobs
- 5250
- Database**
- Tables
- My requests
- Run SQL
- Copy data to table
- Import request
- Import query
- Extract server data
- Files**
- Command**
- Download**
- Customize**
- Other**

Related Links:

- iSeries Access for Web
- iSeries Access
- iSeries Navigator
- iSeries Information Center
- iSeries Resource Library

Tables

Connection: IBM Toolbox for Java - LP126AB.RCHLAND.IBM.COM
 Table filter: *USRLIBL, boats

⏪ ⏩ [1] 2 3 4 5 6 7 8 9 ⏭ ⏮ ⏯

Table	Description	Action ?
BOATS.BOATS	Available BOATS	
BOATS.BOATS1	Available boats by length	
BOATS.PCFILES	PC files needed by BOATS WSG Demo	
BOATS.QCLSRC		
BOATS.QCMDSRC		
BOATS.QDDSSRC		
BOATS.QRNCVTLG		
BOATS.QRPGLESRC		
BOATS.QRPGSRC		
QGPL.#	\$	
QGPL.BITYPES		
QGPL.CHADDEC		
QGPL.CONCURTYPE		
QGPL.CPY_INFO		
QGPL.DAVE		
QGPL.DECSEP		
QGPL.DIVZERO		
QGPL.DIVZERO2		
QGPL.DSD		
QGPL.DSPSFWRSC	Output file for DSPSFWRSC	

Download Database Information from System i

Run SQL allows you to run SQL statements

- Could copy/paste complex SQL statements in here...

Variety of output types

- PDF, Excel, 1-2-3, XML, etc

Destination

- Browser
- Mail as attachment
- Personal Folders
- IFS (new V5R4)

Can save request

- My Requests, Give Shortcut to others



SQL Wizard if you don't know SQL

Create Database Requests with SQL Wizard

SQL Wizard enables you to:

- **Select tables**
- **Select which columns to return**
- **Add conditions to your select statement**
- **Select the columns by which you want the data sorted**

iSeries Access for Web

SQL Wizard

```
SELECT
*
FROM
BOATS.BOATS
```

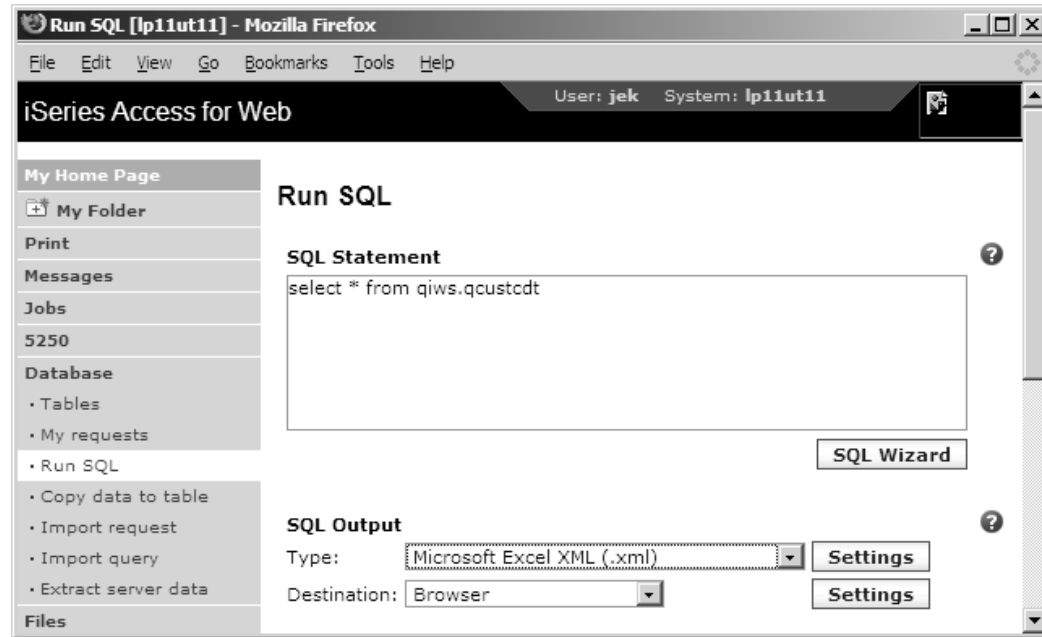
Welcome

This wizard steps you through creating an SQL select statement.

Next Finish Cancel

New in V6R1! Chart SQL Results: Background

- System i Access for Web provides support to run SQL statements and store the results in a selected file format
- Historical supported file formats include:
 - HTML
 - Microsoft Excel
 - PDF
 - OpenDocument



A	B	C	D	E	F	G	H	I	J	K
CUSNUM	LSTNAM	INIT	STREET	CITY	STATE	ZIPCOD	CDTLMT	CHGCOD	BALDUE	CDTDUE
938472	Henning	G K	4859 Elm	Dallas	TX	75217	5000	3	37	0
839283	Jones	B D	21B NW 1	Clay	NY	13041	400	1	100	0
392859	Vine	S S	PO Box 79	Broton	VT	5046	700	1	439	0
938485	Johnson	J A	3 Alpine W	Helen	GA	30545	9999	2	3987.5	33.5
397267	Tyron	W E	13 Myrtle	Hector	NY	14841	1000	1	0	0
389572	Stevens	K L	208 Snow	Denver	CO	80226	400	1	58.75	1.5
846283	Alison	J S	787 Lake	Isle	MN	56342	5000	3	10	0
475938	Doe	J W	59 Archer	Sutter	CA	95685	700	2	250	100
693829	Thomas	A N	3 Dove Cir	Casper	WY	82609	9999	2	0	0
593029	Williams	E D	485 SE 2	Dallas	TX	75218	200	1	25	0
192837	Lee	F L	5963 Oak	Hector	NY	14841	700	2	489.5	0.5
583990	Abraham	M T	392 Mill	Isle	MN	56342	9999	3	0	0

CUSNU	LSTNAM	INIT	STREET	CITY	STATE	ZIPCOD	CDTLMT	CHGCOD	BALDUE	CDTDUE
938472	Henning	G K	4859 Elm Ave	Dallas	TX	75217	5000	3	37.00	0.00
839283	Jones	B D	21B NW 135 St	Clay	NY	13041	400	1	100.00	0.00
392859	Vine	S S	PO Box 79	Broton	VT	5046	700	1	439.00	0.00
938485	Johnson	J A	3 Alpine Way	Helen	GA	30545	9999	2	3987.50	33.50
397267	Tyron	W E	13 Myrtle Dr	Hector	NY	14841	1000	1	0.00	0.00
389572	Stevens	K L	208 Snow Pass	Denver	CO	80226	400	1	58.75	1.50
846283	Alison	J S	787 Lake Dr	Isle	MN	56342	5000	3	10.00	0.00
475938	Doe	J W	59 Archer Rd	Sutter	CA	95685	700	2	250.00	100.00
693829	Thomas	A N	3 Dove Circle	Casper	WY	82609	9999	2	0.00	0.00
593029	Williams	E D	485 SE 2 Ave	Dallas	TX	75218	200	1	25.00	0.00
192837	Lee	F L	5963 Oak St	Hector	NY	14841	700	2	489.50	0.50
583990	Abraham	M T	392 Mill St	Isle	MN	56342	9999	3	0.00	0.00

Chart SQL results: SVG File Format

- Support for new output file type in V6R1
 - Scalable Vector Graphics Chart (*.svg)
 - Language for describing 2D graphics in XML
 - W3C standard
 - Users can store SQL results in a chart

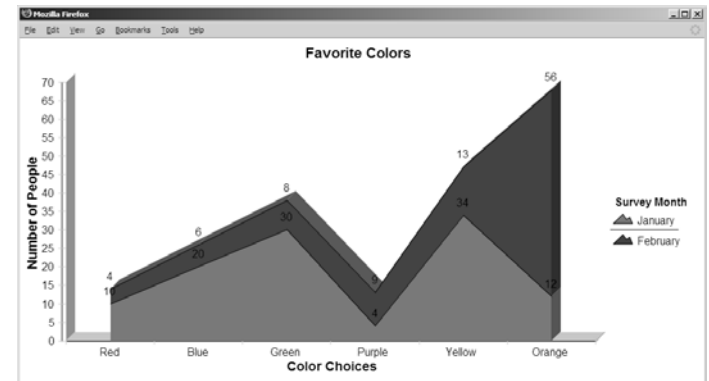
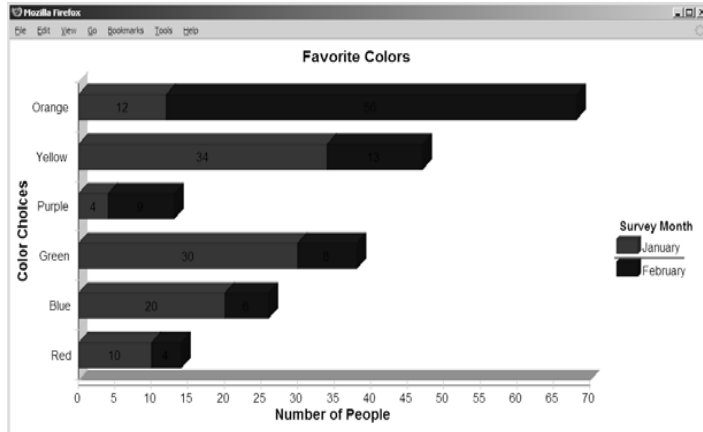
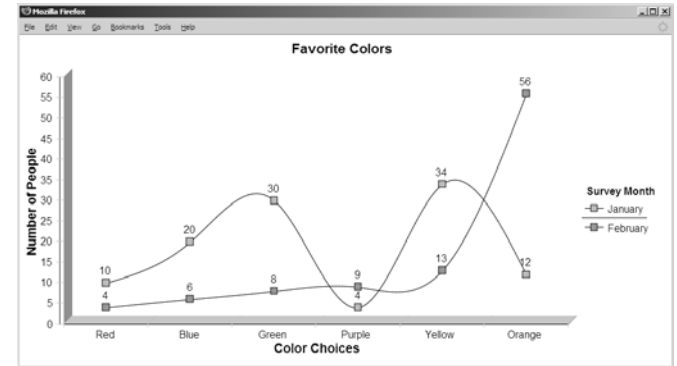
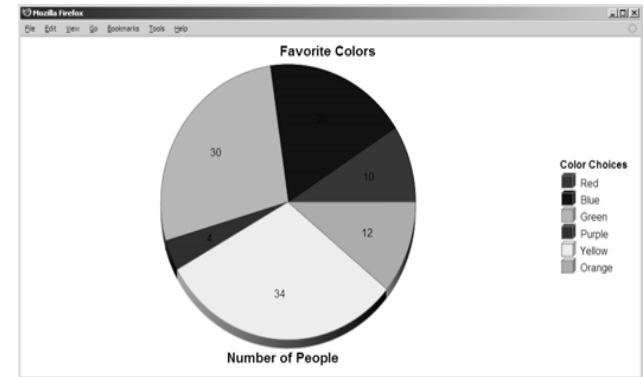
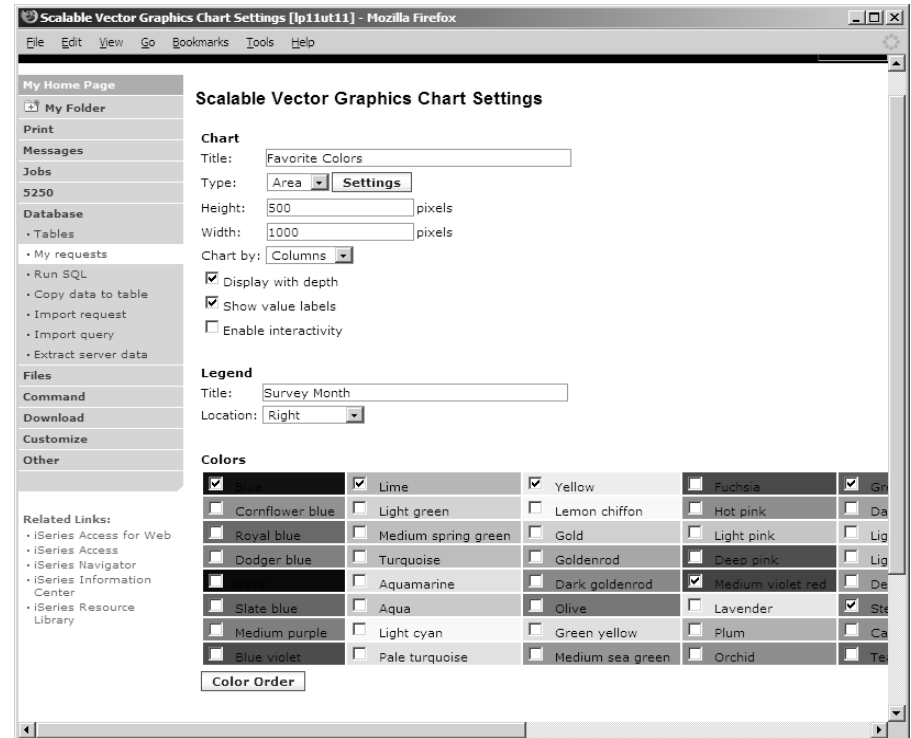


Chart SQL Results: SVG Configuration

- Many configuration options
 - Chart type
 - Area, Bar, Pie, Line
 - Colors
 - Legend location
 - Grid shown
 - Chart type options
 - Bar – vertical or horizontal
 - Pie – exploded or complete
 - Line – marker shape
 - Other....

- Same destination options:
 - Browser, mail, IFS, personal folder



Database - Run Requests



Administrator could:

- Give users or groups of users some database requests that were created for them.
- Users can run only these specific requests
- No other database options offered

iSeries Access for Web

My Home Page
Print
5250
Database
· My requests
Files
Download

My Requests

« « [1] » » » Q

Request	Description	Action	Shortcut	Created By	Access
Shortcut to Boats For Sale	View all available boats		Yes	CMINER	groupa
Shortcut to Find Boat To Buy	Select type and price limits		Yes	CMINER	*PUBLIC
Shortcut to My Customers Mailing	Mail Customer List		Yes	CMINER	groupa
Shortcut to My Customers Mailing	Mail Customer List		Yes	cminer	cminer1
Shortcut to Put My Customer List in Folder	Store Customer List		Yes	CMINER	groupa
Shortcut to request sql			Yes	secyesi	*PUBLIC
Shortcut to request upload			Yes	secyesi	*PUBLIC

« « [1] » » » Q

Related Links:
· iSeries Access for Web
· iSeries Access
· iSeries Navigator
· iSeries Information Center
· iSeries Resource Library

Printing



Work with Printer Output, Printers, Queues

Typical end user printer tasks

- **Printer Output**
- **PDF Printer Output**



Tasks more oriented toward system operators, administrators, programmers, etc

- **Printers**
- **PDF Printers**
- **Internet Printers**
- **Internet Printer Shares**
- **Printer Shares**
- **Output Queues**



Work with Printer Output

http://<myiseries>/webaccess/iWASpool

My 'printer output'

Actions include:

- **Work with**
- **View**
- **View As**
- **View PDF**

Easy-to-use GUI for working with my printer output

- **Don't need to sign onto a 5250 session, and run commands to get to spool file**

The screenshot shows the 'iSeries Access for Web' interface. The main content area is titled 'Printer Output for cminer'. On the left, there is a navigation menu with options like 'My Home Page', 'My Folder', 'Print', 'Messages', 'Jobs', 'Database', 'Files', 'Command', 'Download', 'Customize', and 'Other'. The main table displays printer jobs with the following columns: File Name, User, Creation Date/Time, Pages Per Copy, Copies, Status, Action, User, Job Name, Job Number, and File Number.

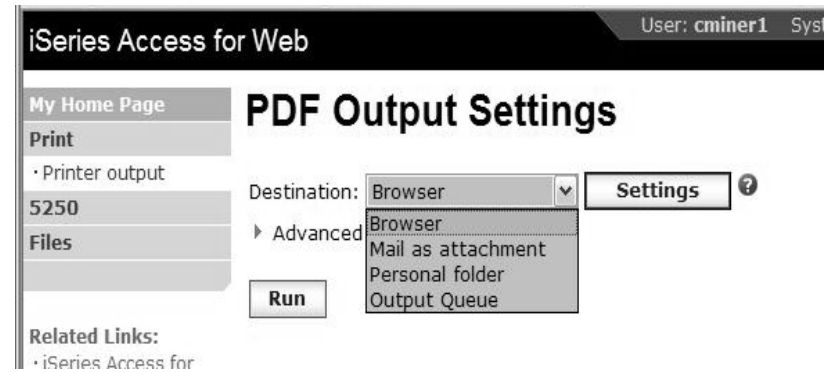
File Name	User	Creation Date/Time	Pages Per Copy	Copies	Status	Action	User	Job Name	Job Number	File Number
QSYSPRT	CMINER	12/15/05 4:31 PM	1	1	Ready	[Icons]	CMINER	CMINER0	502274	
QSYSPRT	CMINER	12/15/05 4:31 PM	1	1	Ready	[Icons]	CMINER	CMINER0	502274	
QSYSPRT	CMINER	12/15/05 4:32 PM	1	1	Ready	[Icons]	CMINER	CMINER0	502274	
QSYSPRT	CMINER	12/15/05 4:39 PM	1	1	Ready	[Icons]	CMINER	CMINER0	502274	
QSYSPRT	CMINER	12/15/05 4:41 PM	1	1	Ready	[Icons]	CMINER	CMINER0	502274	
QPRINT	CMINER	12/15/05 4:48 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502281	
QPRINT	CMINER	12/15/05 4:50 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502285	
QPRINT	CMINER	12/15/05 4:52 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502287	
QPRINT	CMINER	12/15/05 4:57 PM	1	1	Ready	[Icons]	CMINER	QIWAPDFSTR	502291	

Note: IBM Infoprint Server (57xx-IP1) is NOT needed to use "View PDF"

Printer Output - Spoolfile

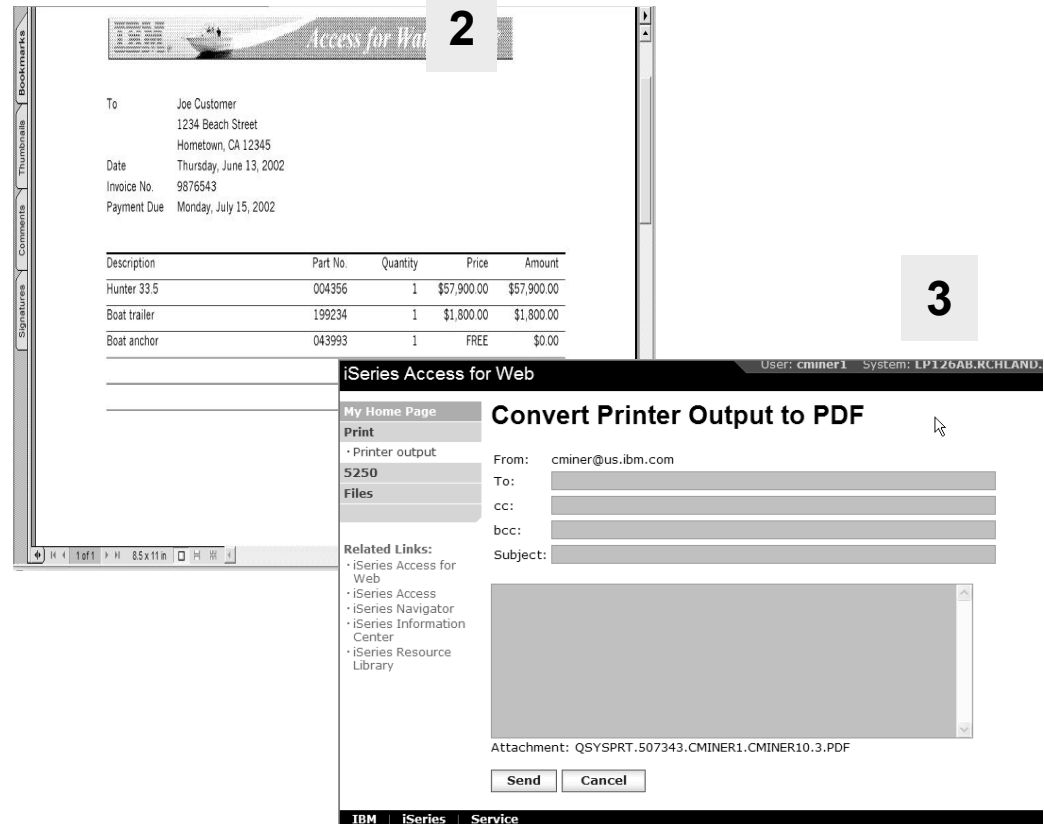
1. Requested 'View PDF'

- Can select any option on pulldown for my printer output



2. View in Browser

- Shows overlays, etc
- Can print on any printer in network



3. Send .PDF document in an email

- Mail server does not have to be installed on iSeries

PDF Printer Output

<http://<myiseries>/webaccess/iWAPDFPrinterOutput>

Printer output automatically converted to PDF and placed in PDF Printer Output Queue at spool time

Actions include:

- View
- Copy to File
- Copy to Folder;
- Delete
- Mail

Actual host application could additionally send spooled file to another output queue (in SCS or AFP mode)

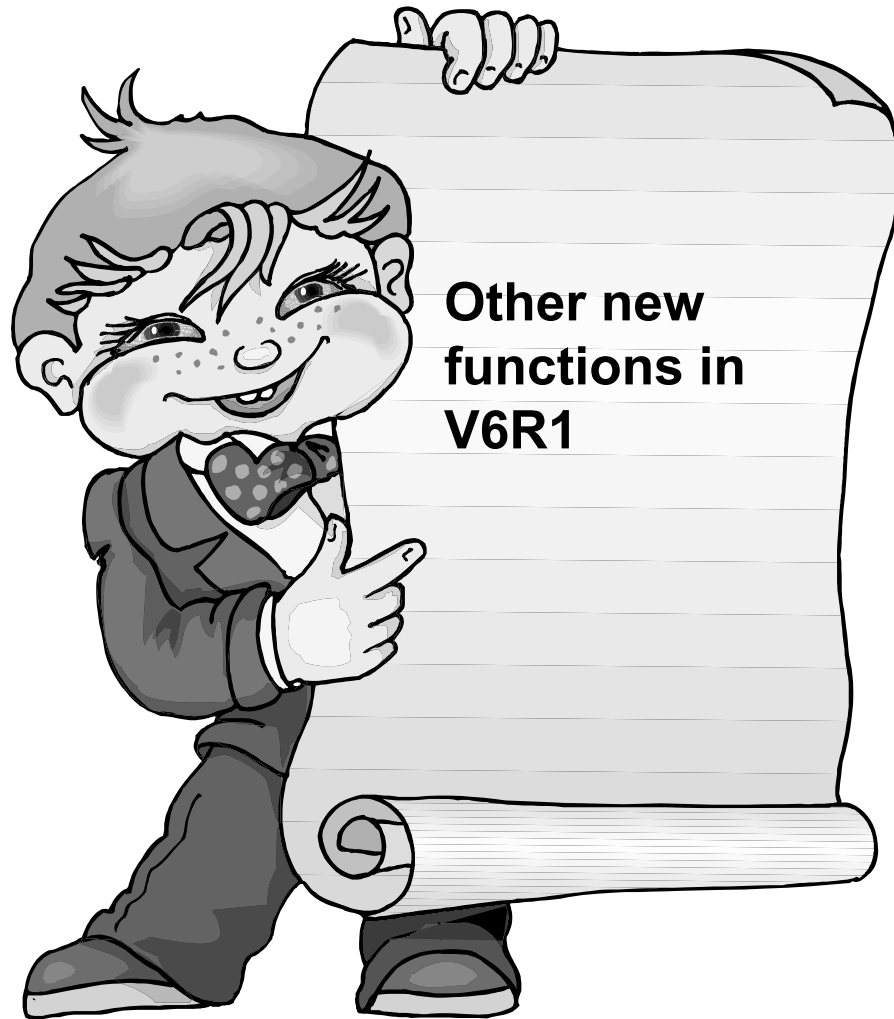
File Name	File Number	User	Creation Date/Time	Job Name	Job Number	Action
QSYSVRT	5	JOANSG	4/7/05	QPRTJOB	064814	[Icons]
QSYSVRT	1	CLARKD	4/27/05	QPADEV0018	115207	[Icons]
QSYSVRT	2	CLARKD	4/27/05	QPADEV0018	115207	[Icons]
QSYSVRT	1	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSVRT	2	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSVRT	3	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSVRT	4	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSVRT	5	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSVRT	6	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
COVER_PAGE	11	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG1_3812	12	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG2_3812	13	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG3_3812	14	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BOX_3812	15	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
MBX_3812	16	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
IMG_3812	17	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
HRZ_3812	19	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]

Note: IBM Infoprint Server (57xx-IP1) needed to use “PDF Printer Output” and “PDF Printers”

Many other functions in the product!



**We briefly covered only three areas:
5250,
Database,
Print**



New in V6R1!

Single sign-on via Windows domain login – V6R1

- WAS 6.1 provides a trust association interceptor (TAI) that uses the Simple and Protected GSS-API Negotiation Mechanism (SPNEGO) to securely negotiate and authenticate HTTP requires for secured resources in WAS.
 - This uses kerberos authentication.
 - The SPNEGO TAI enables Windows domain login to be used when granting access to secure resources in WAS.

- When V6R1 System i Access for Web is configured in a SPNEGO TAI environment, the Windows workstation user can login to the Windows domain and have Access for Web use those credentials to authenticate to i5/OS

New in V6R1!

Schedule tasks: Create automated task as a .jar file

The screenshots illustrate the following steps:

- Step 1:** In the 'My Requests' table, click the 'Action' icon for the request 'JCV61_SEL_CSTFIL'.
- Step 2:** Select 'Schedule the task' from the dropdown menu.
- Step 3:** In the 'Create Automated Task' form, fill in the following details:
 - Request: JCV61_SEL_CSTFIL
 - User profile: jcook
 - Password: [masked]
 - Confirm password: [masked]
 - Output file: /JCSQLCST.ext
 - Java archive: iwATask.jar
- Step 4:** Click the 'Create Automated Task' button.
- Step 5:** Review the 'Database help' link: [Database help](#) /view help for creating an automated task.

1. Build the request and save it
2. Select "schedule the task"
3. Create (define) the task
4. Completed automated task definition
5. Review Database help to determine how to run the scheduled task

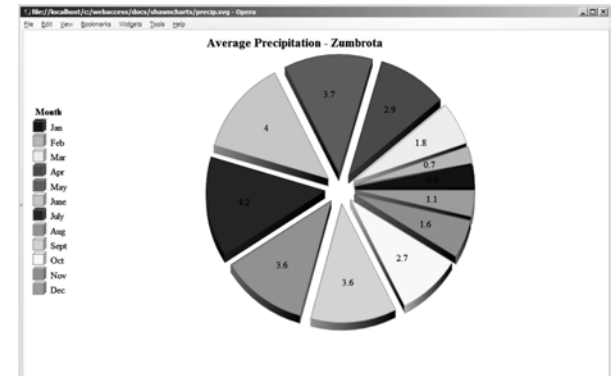
Summary



System i Access for Web V6R1 Enhancements



- Single sign-on: support authentication using Windows domain login
- Chart SQL results in bar, area, line, or pie chart
- SQL wizard supports joins of multiple tables
- Automation and scheduling of tasks
- JSR 168 Portlets



***Functional enhancements can be submitted via the FITS system. The url is:
<http://www.ibm.com/systems/i/software/access/>***

And click on link “[Request for Design Change](#)”

Why use System i Access for Web?

Start simple, grow fast...

- Any System i customer -- with any hardware model - can quickly get started working in a Web environment
 - ▶ If their system is not capable to running WAS, they can easily install the ASF Tomcat web application server. ASF Tomcat runs on hardware with 70 CPW and 256 MB memory
- Any System i customer -- with little Web experience - can easily get started working with e-business
 - ▶ System i Access for Web is simple to install and configure
 - ▶ No programming skills required to set it up
- Any System i customer -- without training or setup on users' desktops - can extend the reach of their resources to end users
 - ▶ Use customize facility to set up view ('window') to System i and to control access to various i5/OS resources
 - all built around i5/OS user profiles

*A great first
step to get
System i
into e-
business*



*Use 'out of
the box'*

Additional Information

- System i Access Family Home page:
 - <http://www.ibm.com/systems/i/software/access>
- System i Access for Web Home page:
 - <http://www.ibm.com/systems/i/software/access/web/>
- Demo of System i Access for Web:
 - <http://iseriesd.demos.ibm.com/webaccess/iWAHome>

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